

*architecture/engineering/construction*

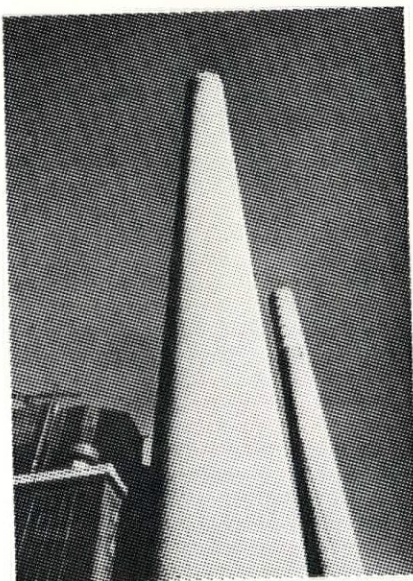
# ***symposia***

**february, 1970**





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*Symposia/February, 1970*

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# symposia

construction communications  
in the West

VOLUME 4

NUMBER 9

FEBRUARY, 1970

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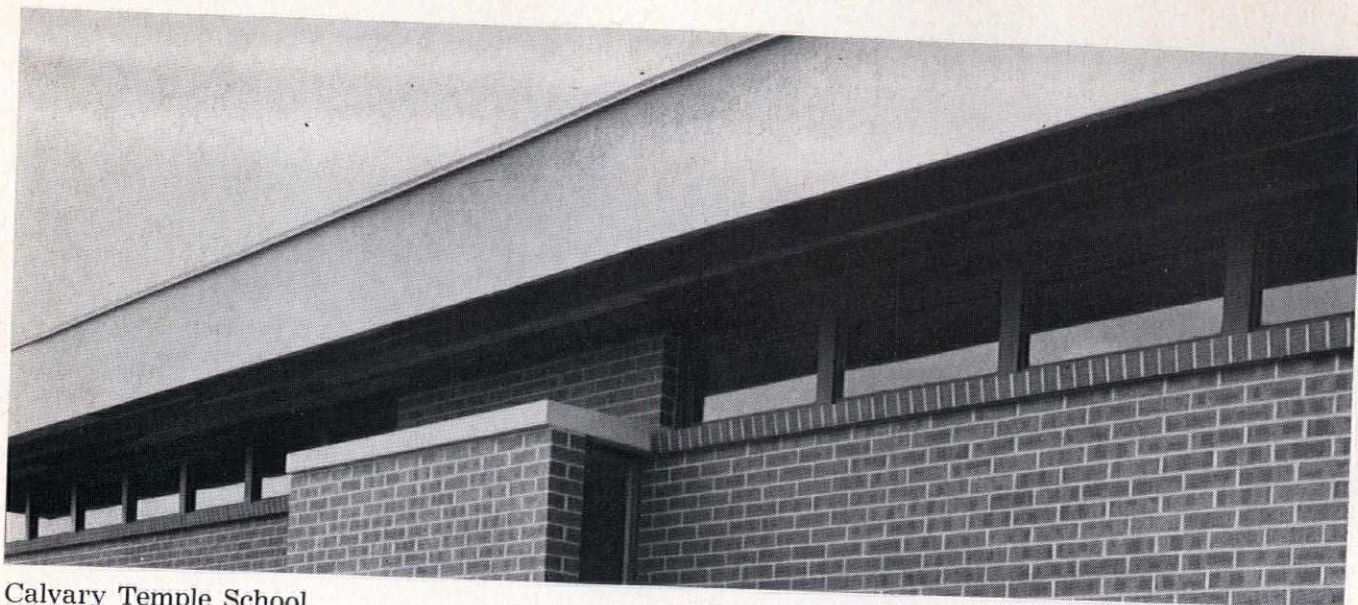
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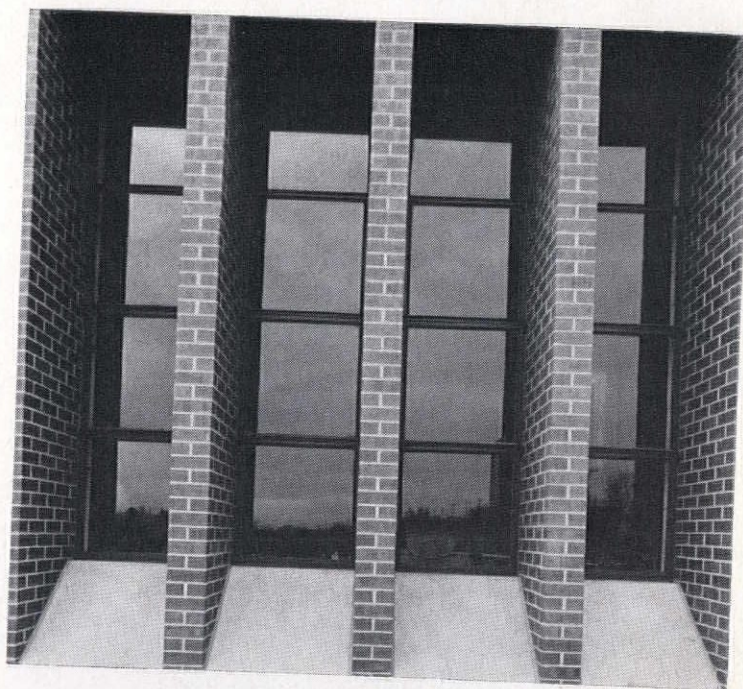




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# engineering week/1970



Washington has been described as the "father of his country," a handy kid with a hatchet and "last in the American League." He is also, because of his work with the transit, regarded as something of the "patron saint" of American Engineers. For the past two decades, the week of Washington's Birthday has been set aside by the profession as "Engineering Week" and celebrated with meetings, banquets and exhibits throughout the nation. This year is, of course, no exception. Theme set by the National Society of Professional Engineers for this time around is "Engineering-Environmental Design for the 1970's," and the

Society's official statement reads, in part—"The broad scope of environmental problems and the increasing impact of technology in the next decade places a tremendous challenge before the engineering profession — to understand and evaluate the social, ecological and esthetic impacts of our work on society and its inhabitants." In Colorado, the Consulting Engineers Council will hold its Third Annual Engineering Excellence Awards program. Open to projects completed by consulting engineers during 1969, the program is under the direction of a committee headed by Bill Bredar of the Denver office of Henningson, Durham and Richardson. Judges will include Deans of the Schools of Engineering at the University of Colorado, Colorado State University, the University of Denver and Dean DeVon Carlson, AIA, of C.U.'s School of Architecture. The fifth judge will be from the Colorado School of Mines.

Winners will be recognized at the Awards Banquet, a "black tie" affair scheduled for February 24th at the Brown Palace Hotel. They will also be entered in the Consulting Engineers Council/USA competition with national awards to be presented in Boston next June.

Chairman for the activities planned by the Professional Engineers of Colorado is Mr. John G. Ditmer of Arvada—coordinating the efforts of the nine PEC Chapters and other engineering organizations within the state.

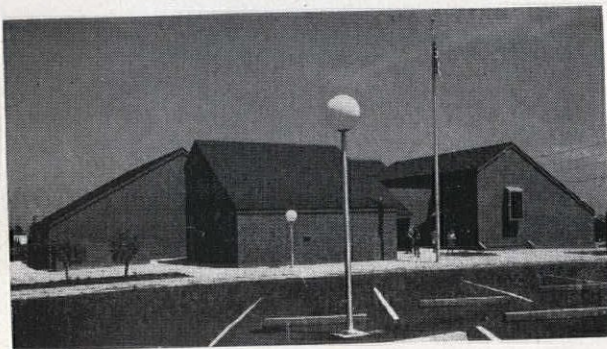
Slated for Thursday, Friday and Saturday, February 26-27-28 at the Harvest House in Boulder, is an Engineering Convention which will embrace all of Colorado's engineering organizations — CEC/Colorado, PEC, Colorado Society of Engineers, the American Society of Civil Engineers and the Colorado Engineering Council. On Thursday, February 26th, the highway groups will meet—others will convene on the 27th and 28th.

In Utah, Engineering Week has always been a most important event, and the dates for the meetings and exhibits have been set for February 27-28. Utah's Consulting Engineers (CEC/US National President, Art Maxwell, is a principal in the Salt Lake City firm of Nielsen and Maxwell), Utah's Engineering Council and other engineering groups are cooperating to make this year as successful as its predecessors. Site of the meeting and exhibit is the new Salt Palace in Salt Lake City.

Idaho Engineers are meeting somewhat earlier in the month at Boise—this is covered in detail in Mr. John Hoffman's report in "Idaho"—"Around the Region."

In conclusion, we would agree most wholeheartedly with the NSPE statement — "We need to assure for all Americans safe, healthful, productive and aesthetically and culturally pleasing surroundings." A fine goal for Engineers and for all of us in the architecture/engineering/construction community.

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1969 S.C.P.I./A.I.A.  
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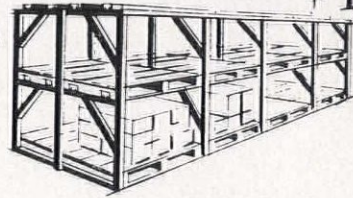
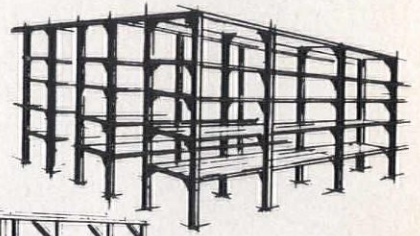


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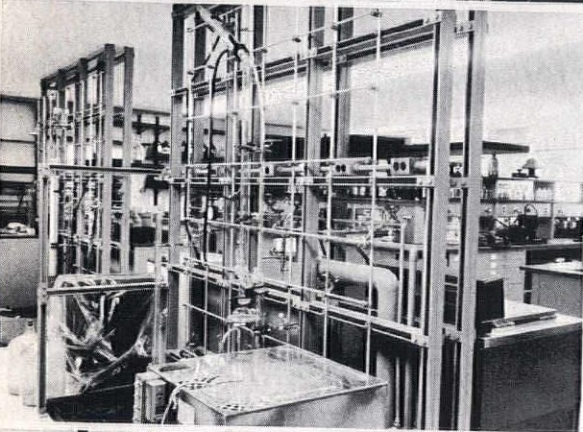
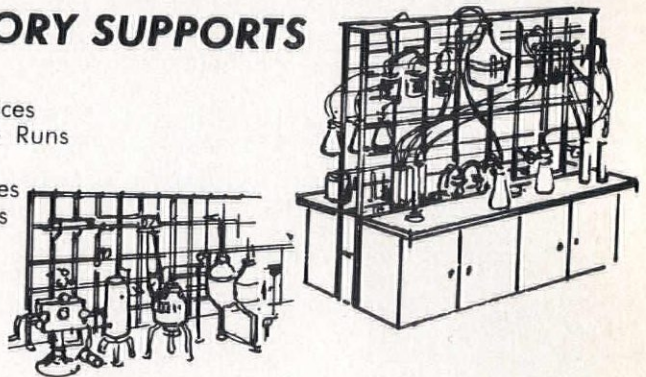
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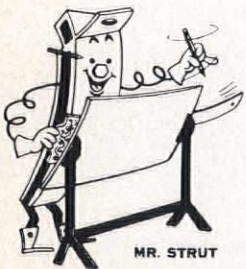
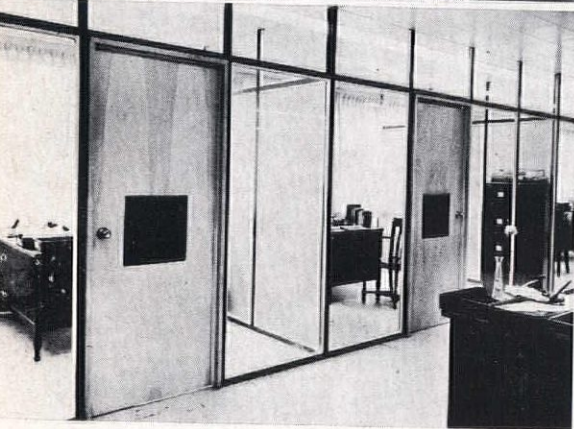
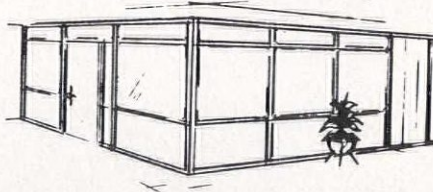
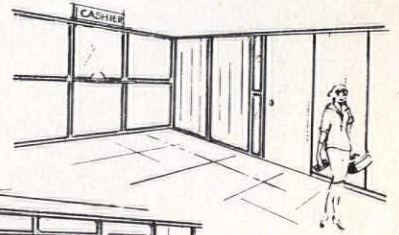
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the  
last  
word:

January 22 was the date of the "sneak preview" of the new office of the Utah Chapter/AIA. Cocktails were served and comments Exec. Secretary, Ann Marie Boyden in her sprightly Utah Newsletter—  
"Here's your chance to spill your drink because after the carpet goes in, we just won't allow that sort of thing."

Colorado architects, Rogers, Nagel, Langhart have unveiled a new planning and research organization under the direction of Jerry Nagel. Tagged "Interplan, Incorporated"—they will provide a systems approach to programming, computerized cost projections and feasibility studies for educational and commercial fields.

The Rocky Mountain (Denver) Chapter of Producers' Council has a Satellite Meeting scheduled for Fort Collins-Greeley architects on February 10. In addition to the architects enjoying the Luncheon Buffet at the Fort Collins' Holiday Inn, members of Kodak have also been invited.

The Albuquerque Chapter of the Construction Specifications Institute discussed "Ceiling Diffusers and Sound Control Systems" at their January 13th meeting at the Sundowner Motor Hotel.



Although members of Portland's Multnomah Athletic Club voted down acceptance of preliminary plans for a \$5 million dollar expansion program prepared by architects Wolff/Zimmer/Gunsul/Frasca and Ritter—the project was cited by Progressive Architecture in its annual design award program. There's a message there somewhere.

Lyle Mayhew, Secretary-Treasurer of the Pikes Peak Chapter/CSI has moved to Denver and Clint Keller has been appointed to fill the vacancy. Since Clint was already a member of the Board, Ralph Fowler has been appointed to fill his slot. Best wishes to these new Pikes Peak officers.

Denver's P.C. members are looking forward to a repeat of last year's smashing success. We are, of course, referring to the Annual AIA-PC Luncheon Buffet slated this time around at the Albany Hotel on February 23.

On January 24th, E. W. McKenzie, Potentate of Kerak Temple, Nobles of the Mystic Shrine of North America was honored at a reception held in the Pioneer Auditorium in Reno, Nevada. McKenzie is President of the McKenzie Construction Company, one of Nevada's largest contracting firms.

It was our very real pleasure to meet Forrest Wilson, Editor of Progressive Architecture, at a delightful Open House held in his honor at the home of Tom and Norma Keeton in Denver. We can only say Forrest certainly lived up to all his advance publicity.

Utah's active "Women's Architectural League" had a marvelous "Fiesta Night" on January 16th. This fun affair with the "south of the border" accent took place at the Guadalupe Center in Salt Lake City. Ole and all that jazz!



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A second round of International Encounters in "Construction and Humanism" will be held March 11-17 in Cannes...or so the French Government Tourist Office tells us. Why is it all we could hear is the late Judy Halliday in her best "Born Yesterday" Brooklynese saying... "Like to go to Cannes, or anything, honey?"

ON THE HORN—with Ronn Ginn who tells us he has lined up some top-notch guest writers for his fine series on Urban Affairs—next installment "Professional Programs" in March—with Ralph Edwards, AIA, Salt Lake City who is predicting exciting events during the upcoming Architect's Week in May.

## STUDENT AFFAIRS

### It's New At M.S.U.

by: Calvin Hoiland, AIA

(A completely new way to "make the scene" comes our way from Montana where students have "a new bag" for demonstration purposes).

This is a completely different news item for Symposia since it involves the Montana/April 22nd Moratorium. The kids here seem to realize that we're getting out of Vietnam as fast as we can; they're looking for a way to exercise their newly realized influence, and have decided that the "ecology route" is both popular and necessary for life.

Consequently, coordinators have begun at both Bozeman (M.S.U.) and Missoula (U.M.) to organize—"A student action demonstration on concern for the environment." This bunch, in turn, will spread the movement to all other colleges in Montana and, through the Student A.I.A. Chapter, will coordinate student chapters in the Northwest Region.

Their goal(s) is (are):

- To increase public awareness of the problem
- To develop public concern
- To seek public commitment to work for environmental cleanup, and
- To initiate some ACTION

This effort to peak on April 22nd in a demonstration of some sort. I think it sounds great, and is a helluva lot better than acid tripping, honkie shooting or burning libraries. Now, if nobody tells 'em this will be patriotic, the thing should go off without a hitch.

Gordon Whirry, School of Architecture, Reid Hall, Montana State University, Bozeman, Montana—59715 is the man to contact as Student Coordinator of the demonstration, if anyone is interested in the movement.

(ED: We would only paraphrase Cal to this extent—anybody knows it's a helluva lot more fun to sing, march and demonstrate than stay home, hit the books and chop cotton. And pardon our crew-cuts.)



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# the Seamless Beauties

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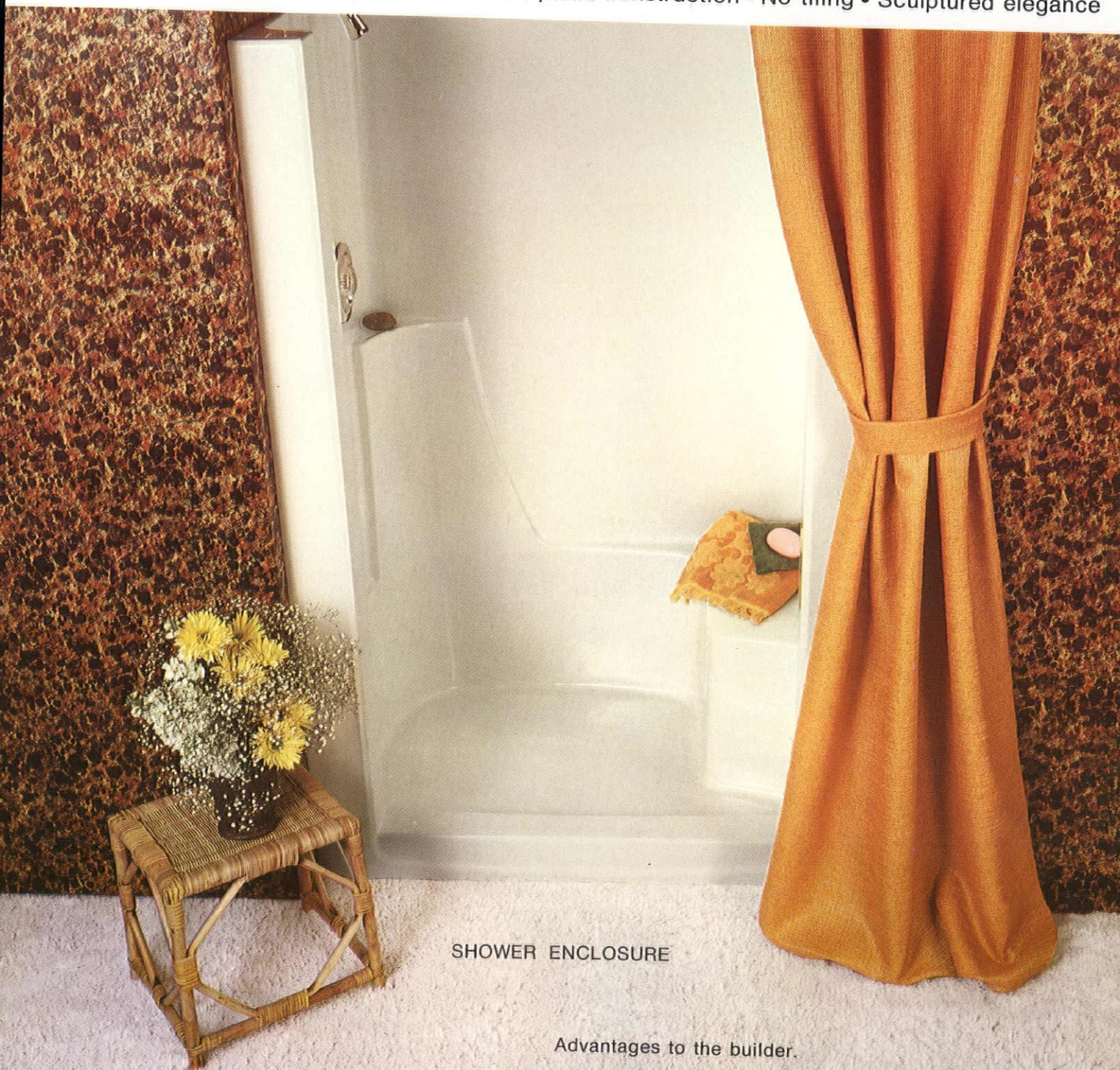
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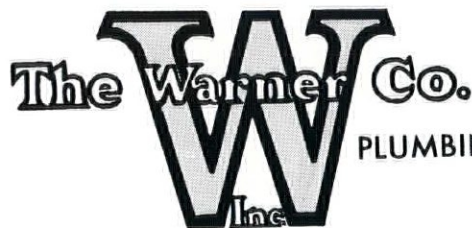
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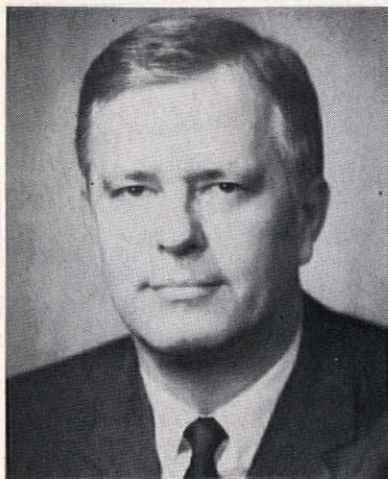


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## Employee/Employer A Relationship in Transition



George E. Kassabaum, FAIA

Speaking at the Third Annual Conference of the Joint Committee on Employment Practices, George E. Kassabaum, FAIA, immediate Past President of the American Institute of Architects, told employers in seven professional fields that creative opportunities for employees can prove a potent weapon against unionization. "We must admit," stated Kassabaum, "that a professional service organization cannot compete on the basis of wages alone with a large industry that also has a product to sell." He pointed out that increased profit can be obtained through better organization, the use of machines and assuming

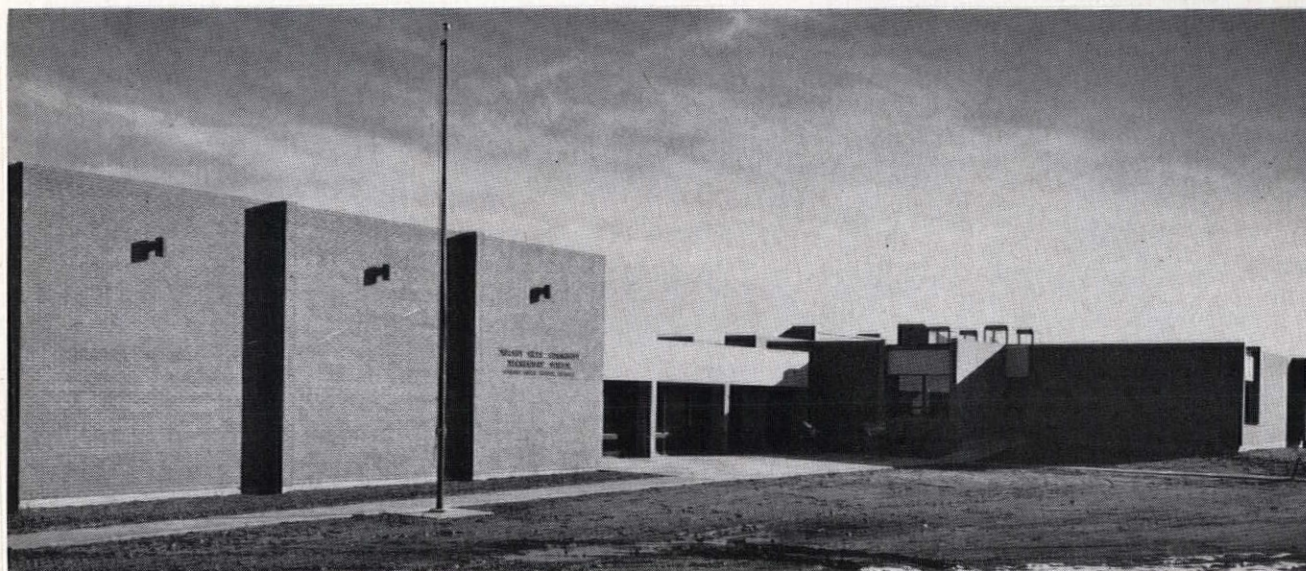
new jobs which the public will demand. "The answer is to spend less time doing what we are today and more time doing what we don't do." However, Kassabaum added, "I think we had better reconcile ourselves to losing the men who are really only interested in the salary they make."

"The firms that will flourish are those that organize in a way that permits a new man to have as much individual freedom as his experience will allow—where he has a chance to try his ideas rather than just draw up those of his boss." This type of organization, said Mr. Kassabaum, will have a strong attraction for today's students.

The Third Annual Conference was held in Chicago, and brought together participants, both employers and employees, from the A.I.A., the American Congress on Surveying and Mapping, the American Institute of Chemists, American Society of Civil Engineers, the C.E.C./U.S., Council for Photogrammetry and Professional Engineers in Private Practice.

In summation, we would quote from a paper commissioned for the meeting and prepared by University of Michigan political scientist, Professor Charles M. Rehmus . . . "For other groups of professionals who have not yet embraced the union model, alternatives still remain open. It is up to employers and professional associations to offer attractive alternatives . . . if we allow professionals on some regular and organized basis to sit together with their superiors to develop organizational goals, policies and plans, I suspect, that much of the pressure for unionism will be drawn off."

The proceedings of this Third Conference will be available about March 10 from the National Society of Professional Engineers, 2029 K Street, N.W., Washington, D. C. 20006. The cost will be \$5.00.



Walnut Hills Elementary School

Architect: William C. Haldeman

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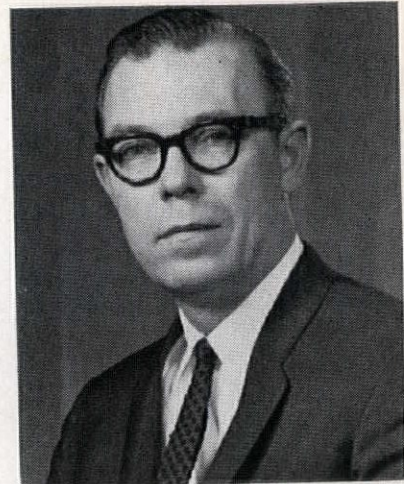
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Harry P. Thomasson, President  
Colorado Contractors Association

C  
C  
A



Carl Halvorson, President  
Associated General Contractors

## 37th Annual Convention January 30 - 31, 1970

Promptly at 9:00 a.m. on Friday, January 30, Harry P. Thomasson rapped his gavel and the 37th Annual Convention of the Colorado Contractors Association was open for business. Held at the Brown Palace Hotel, the meeting brought to Colorado's Heavy and Highway Contractors (A.G.C.) a wide spectrum program dealing with the many complexities of this branch of Construction.

Business sessions on Friday featured a Highway Panel composed of contractors who reviewed the new Division of Highways Specifications, the publication of engineer estimates, retained percentages and price adjustments. Present prequalification procedures were also discussed. Also on Friday, directors were elected by the membership. These gentlemen met for luncheon on Saturday, January 31 to elect officers for 1970. (Results unreported in this issue because of "dat ole debbil deadline").

The Intra-Industry Luncheon held in the Brown Palace Ballroom at noon on Friday was addressed by Colorado's Governor John A. Love.

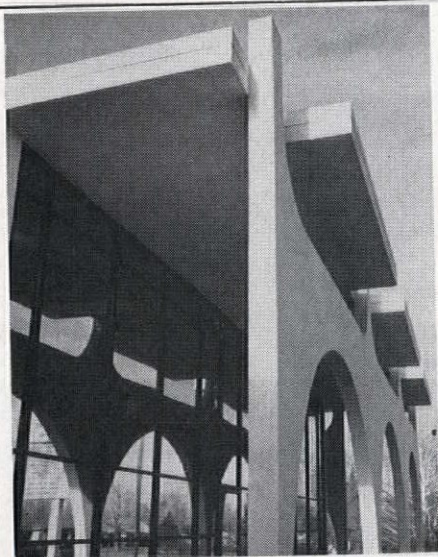
Highlight of Friday activities was the appearance of Carl Halvorson, President of the Associated General Contractors of America, who addressed the All-Member Dinner meeting in the evening. Mr. Halvorson, a Heavy Contractor from Portland, Oregon, has contributed significantly to a better understanding of the Contractor's problems by the present administration.

The Association Educational Committee, headed by Harold Anderson, conducted the Second Annual Office Managers' and Superintendents' Training Seminar. This year's session was a combined meeting with office managers and superintendents discussing topics which included communications, labor relations, motivation and Equal Employment Opportunity.

As always, C.C.A. furnishes an extra incentive for members to "rise and shine" for the Annual Safety Breakfast held this year at 7:30 a.m. on Saturday. This time around that "incentive" was provided by Miss Carol McClanahan, runner-up in the Miss Teenage America Contest. The principal speaker was Mr. Frank Rozich, who is the Director of the Water Pollution Control Division of the Colorado Public Health Service. Mr. Rozich outlined anticipated construction programs for water pollution control within the State.

The Manpower Development and Training Seminar on Saturday morning featured a panel of Contractors and Apprenticeship Coordinators who discussed methods to develop and utilize the training programs.

The 1970 Convention of the Colorado Contractors Association concluded in the time honored way with a gala Banquet Dance which was held this year at the Denver Merchandise Mart.



architect: Harry H. McMichael

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# UP UP With People!

(A brief report honoring Industry members in our Rocky Mountain Region who have achieved some of the "good things in life" in the past few weeks.)

## UP WITH MURRAY

Myles A. (That's Tony, of course) Murray has taken another rung on that ladder of success. Protex Industries Inc. has announced that he has been appointed to the newly created position of Director for Technical Services for both domestic and foreign markets. Something we didn't know 'til now . . . Protex has manufacturing facilities in England, Toronto, Montreal, Chicago and Hawaii. Tony will continue to headquarter in Denver, and is continuing in his role of Technical Representative in the Rocky Mountain Region.

Tony is an Architectural Engineering graduate of Colorado University, and prior to joining Protex in 1967, he had been engaged in Consulting Engineering. He is very active in the Denver Chapter of Construction Specifications Institute serving as the General Chairman for the 1969 Region 10 Forum in Colorado Springs. Tony and his pretty wife, Donna are the parents of two daughters.

It's great when good things happen to great people, and we are delighted to say UP WITH MURRAY!

## UP WITH KLINE

Robert L. Wieland, Chairman of the Council of Certified Kitchen Designers, has announced that Mr. C. W. Kline (Kitchens by Bill Kline) has been given the right and the honor to add the letters . . . C.K.D. after his name. These very important letters stand for Certified Kitchen Designer and this is a professional "degree" similar to that of the interior designer or certified public accountant. Individuals certified as C.K.D. have established their special competence through documented proof of knowledge, ability and experience in the design, planning and supervision of residential kitchen installations. The C.K.D. was created by the American Institute of Kitchen Dealers to establish a set of professional standards for the kitchen specialist establishing a pattern of identification for the professional in the field as a recognized and authoritative consultant.

We extend our heartiest to Mr. Kline on his certification in the time honored way by cheering UP WITH BILL KLINE!

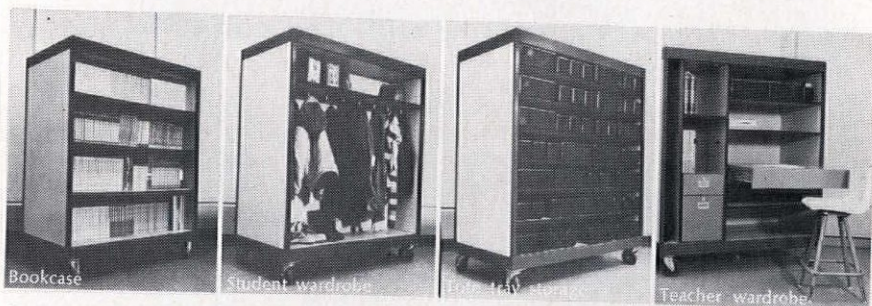
# GRANITE LINE MODULAR ROLLING CASEWORK

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Prospect Valley Elementary School, Jefferson County School District, R-1, Colorado. Rogers / Nagel / Langhart / Architects. Photo by Gary T. Merideth



*Designed and Patented by Hugh M. Lyman, Jr.*



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## this is the house that youth built!

*In preparing this article, Symposia would acknowledge our debt to the twenty-five students in Mrs. Stults' English classes at Manual High School in Denver, who prepared evaluations of the project reflecting both thoughtfulness and maturity. We would also wish to thank their instructors and particularly Mr. Arch Jeffries, Coordinator for Manual's Career Program, who provided the "on the job" graphics; David Muirhead of the Construction Advancement Program/Associated Building Contractors of Colorado (A.G.C.) and our Editorial Board members, Don Decker and Pat Dulaney, who urged us to give this Manual Project the recognition it deserves throughout our Region.*

Recall, if you will, the long childhood rhyme which described in repetitious detail "the house that Jack built." Manual High School in Denver, Colorado and its "house that Youth built" makes the story of Jack's residence simple by comparison.

At this writing, Manual's house is virtually complete, solid brick testimony of the devotion of scores of people, both young and old. It has been in the past year (ground-breaking ceremonies were held 5, February, 1969) an educational experience for everyone concerned—instructors and interested outsiders, as well as the young men themselves. It is moreover beyond a "noble experiment" for the house has been sold (Under HUD-235) and will be occupied and enjoyed by a family with ten children. It becomes then—not a house, but a home.

### The Educational Thrust

During the past two affluent decades, American parents and educators alike, have predicated secondary level curriculum upon the premise that "college was for everybody." We placed ourselves, or so we thought, upon the side of the angels. The B.A./B.S. degree, with or without the summa cum laude, was the goal. Upon sober reevaluation, we are now recognizing the fallacy of such an educational approach. All young people have talent—not all young people have academic talent. The skills of the craftsman are lost to society when curriculum stress upon academic achievement forces otherwise gifted young people to turn their backs upon high school education... "dropping out" and placing themselves in the cul-de-sac of the unskilled. Suffice it to say, it is easier today for a student to attend college than to be accepted in an apprenticeship program... a sad commentary upon the biased and unrealistic approach of the Trades Unions. They have categorically turned their backs upon a wealth of talent and ability.

Manual High School in Denver, Colorado is located in an "old neighborhood"—that is to say, much of the area verges upon decay. The population is largely "minority."

But, in the halls and the classrooms of Manual, there is no defeatism—it is a "going place." James Ward, Manual's principal, is in those halls—a dynamic force for responsible achievement by his students. In a small office on the lower level is Arch Jeffries, a teacher—but more than a teacher—a builder... (he has carried both a Journeyman Carpenter's card and a General Contractor's license) not just of houses, but of programs and students.

In Manual's "Career Program," Jeffries and Ward have initiated a challenging departure from "college-oriented" curriculum which has given Manual's young men a closer look at both sides of the coin... the practical procedures and delineation of fundamental areas of knowledge forming a background to enable the students to make a sound "career" choice in the future.

It is a three-year program. During the sophomore year, students are given experience in three basic vocational skill programs—Construction; Machine Shop/Metal and Welding or Power and Transportation. From these courses, each student may choose in the Junior year, the field he most desires to follow. During the Junior year, the Building Construction students are given orientation and training in Carpentry, Bricklaying and Concrete Work, Housewiring and Electricity and in Plumbing and Heating. "At the Senior level," writes Mr. Jeffries, "it is hoped that they have found themselves and wish to pursue a definite skill to the fullest extent. In order to accomplish this goal, we endeavor to place the student through our Industrial Cooperation Education Program in the field of his choice in industry, working one-half day, and in the classroom one-half day. Upon graduation, he should be well qualified to pass the apprentice test and enter for his final training toward becoming a journeyman and taking his place in industry to fulfill the needs of the labor market and make a better place for himself in society."

### Implementing the Program

To provide an actual learning-laboratory, there was, in 1968, a determination to actually build a house from conception to completion and to include all the ramifications of such a project. Four student companies, with faculty representatives and technical advisors were formed. These companies were:

#### Manual Architectural Services—

Officers: Carlos Duran, Mario Muniz, David Wilson and Alton Clark. Faculty Representative: Arch Jeffries. Technical advisor: Burt Bruton, A.I.A.

#### Thunderbolt Construction Company—

Officers: Otha Satchell, Leodis Davis, Edgar Johnson, Joe Copeland. Faculty Representative: John Bates. Technical Advisor: Clarence Jackson.

#### Manual and Manual Accounting—

Officers: Sherman Coats, Ron Nobles, Melvin Whitman,





Ray Webber. Faculty Representative: Mr. Typher (Miss Lorbeer assisting) and Technical Advisor: Mr. Dean Mullin.

*Manual High School Realty, Inc.—*

Officers: Michael Terry, Owen Lenox, Oather Thomas and Daniel Thomas. Faculty Representative: Paul Wilkinson. Technical Advisor: Gerald Bradshaw.

The Realty Company was incorporated under Colorado law, and as such, was entitled to do business in the same fashion as any other incorporated enterprise, including the borrowing and disbursement of money and negotiating contractual commitments. The Denver Urban Renewal Authority made available land at low cost, located across from the Manual School grounds, and the Construction Advancement Program (A.B.C.) donated \$640.00 to defray the cost of the down payment for the site, became guarantor for the construction completion guaranty (an \$18,900 commitment should construction not be completed) and set up a \$1,000 cash reserve to clean up end-of-project costs if other sources were inadequate.

The Mortgage Investment Company of the First National Bank of Denver provided counseling as well as the financing for the project; the N. G. Petry Construction Company, and most particularly, Dave Johnson, were of great assistance and the Building Trades Council who advised on curriculum and the development of instructional materials. There was advice and assistance also from various state and local governmental agencies in the matter of building codes, inspection requirements, licensing and so forth.

During the project, the Thunderbolt Construction Company employed two union carpenters, a union apprentice and a state-certified vocations teacher.

Team teaching was employed at the academic level, with Social Studies, English and Mathematics instructors all working with Shop teachers to provide subject matter which could be readily applicable to the project itself.

#### **In Evaluation**

Principal James Ward: "Three years ago, the staff at Manual High School developed the present vocational program for the school. The initial thought behind the effort was to establish a relevant program that might have "holding power" to help youth stay in school. If this purpose could be fulfilled through a vocational skill emphasis, we felt we could also launch into pre-apprentice type programs that might give minority youth the necessary background that would enable them to compete on an equal basis in the work world.—The house construction project has been the learning-laboratory and we feel those students in the building trades program have received an interesting and worthwhile experience."

David Muirhead/Construction Advancement Program:

"Soon after the ground-breaking, it became apparent that considerable pride was in evidence, not only on the part of the students, but many of their teachers as well. Although the site is located in an area where there is a relatively high incidence of vandalism, to date this house has not been touched." . . .

"In essence, this is a Manual High project supported and assisted by others. In my judgment, control has to remain with the educators—this is a school-centered learning experience. Those of us in support roles found the more effective way was to bring the educators along, adding to their experience and exposing them to some of the realities in such undertakings. All the time, we have avoided the inclination to "take over" or "do it our way since we've been through the mill."

"This has been a learning experience for all concerned, and I believe, that is all to the good!"

#### **What Do The Students Say?**

(Twenty-five young men—Sophomores who had just begun the careers program to Seniors who had worked on the house since ground-breaking have been kind enough to help us with their evaluations.

On Monday, January 5, the Symposia team visited and talked with the students. On Friday, January 9, Mrs. Stults, their peppery little English teacher, brought us twenty-five comments. What these young people have to say is far more germane to the success of the project than the completed house itself.)

Marvin Kelly: "At the beginning, I was very excited by the idea of building a house. The hard work and determination that were put into this house helped build a sense of pride in everyone who participated. When we first started, I thought we would never get off the ground, but soon the floors started to form. Next the walls went up and the house looked like a skeleton. But as the house progressed it gave us all the experience of being in some part of the construction field. We got every viewpoint possible in connection with the construction trades." Marvin, a senior, and other students found this was a valuable experience in trying to find themselves . . . even young men who said they "would rather go the other way." For instance, Robert Martinez wrote—"I have gained a little valuable experience in the art of construction. This may help me out when I get out on the college track for architecture next semester." or Derrick Grimes who admitted "It's better than reading books how to build a house. It might be a good career in the future; my uncle is a carpenter and he makes good money. But I don't like it, and I'd rather have auto mechanics." Syngman Moore was much more succinct when he wrote—"I think this program is good if you want to be a carpenter. I want to be a Commercial Artist."





On the other hand, Larry Nickerson was enthusiastic . . . "This is the kind of program that I have always wanted to be in. The way that I see it, they figured this just right to interest the student, and it also gives him on-the-job training. It is a very exciting trade that I hope to enter after I finish school." or Larry Armijo who wrote . . . "Building a house beats reading a book. The program is very interesting for those who want to become something. I found the program very well managed. I've learned a lot about building a house. The teachers helped, too. They learned a lot themselves. It took their time and patience. It was hard work. I would like to go into the apprentice program some day."

"I think I would be good in the trade of carpentry," wrote Alton Clark, "I think I would not have made it in the college track program. The advantages of this program is that I can go right into the Apprenticeship program. One of the bad things is that there is too much talk. This has been a rewarding program, and I am very proud of what I have done." Owen Lenox agrees, "I think I can be a good worker in this trade. I know that I can make it better in the Trades Program than if I was in a college program."

"It was kind of a new job," admitted Myron Simms, "But it's not as bad as people think it is. I like it because I have never done anything like it before. Now, it is fun, educational and shows your talent in what you can do, paint or lay tiles. It has many fields that not just I, but anybody, can like."

Most of the students were looking ahead like Eldon John who wrote: "By actually building a house, I have learned some skills that may some day help me get a job," or Richard Kelley—"Doing work on the house or anything in this field may be mine or some one else's future career." Tommy Lopez felt the project provided "a good place to get some of the techniques" and Walter Haynes termed it a "worthwhile program for the future."

Sophomores who normally would not have worked on the project were pressed into service with the "big push" toward completion. As Dwaine Cary admitted, "I haven't been here long enough to tell you what I feel about the career class. But, in my opinion, I think it should do a lot for me." — "I was only in this class nine weeks," wrote Stanley Jones, "Everything I did over at the house I already knew. If I had been at the house when it began, I probably would have loved it."

Criticisms were constructive . . . students asked for "math that deals with the program" and "math should be based on what kind of math you need—like if you need some algebra take it in relation with the program," and one student spoke of "inexperienced teachers." Mike Terry who headed the Real Estate Corporation said, "The only problem I had was the promises that weren't kept by some of the outsiders. But other than that, it was mellow."

Otha Satchell, President of Thunderbolt Construction, made this realistic and mature analysis . . . "There

should be an increase in the time allowed for completion on the building project. Students, not journeymen, are doing the building. Pressure toward completion by a certain date tends to build up worry and tension. Students become discouraged and drop out."

Otha said, "The next house should be built smaller in size and lower in cost," and Augustine Martinez agrees . . . "Make the next house simple. Design the house within its environment" and Anthony Bridges added—"You should make the house modern, but not so luxurious."

James E. Joyce has another answer for the construction time lag—a systems approach. . . . "In this program, it could be better, if we could build the walls, roofing and the floors for a house in the shop and have a truck to take them over there. We would have the house put up in no time; we would even get better experience in better work." Nor were students unaware of the social implications of the program as Earl Covington said . . . "In building this house in this particular area of the city, it will bring about a better understanding of the people who are now involved, they will see just what CAP is doing for Manual and the adjoining area."

"In my opinion," Carlton Leopard said, "An advantage in the program is that it helps you more than if you were just reading about it. It gives you the advantage over other schools in that you have experience,"—and his final comment, "The only disadvantage is working outside in the cold and sometimes the painting, too." And Walter Newell said, "This program was superficially good for the students education wise. But in building the house, everybody was having their ups and downs."

Two students suggested thoughtful improvements . . . Leeodis Davis who suggested having "senior students talk to junior high students in regard to the advantages and disadvantages of being in career classes in order to help students make more realistic program choices. In this way, we might attract more students who are really interested and would stay in the program." In Al Lowe's excellent six-point analysis he suggests this approach—"The first thing I would tell them (students) is: 'if you plan to go on to college, do not get in the program . . . to urge them to enter the program, I would tell them what the program is for. Then I would tell them this will help them later on.' And, it is Al who has expressed so well the project's impact . . . "At the time, I have set no goals. When I do, they most likely will be different from what they would have been if I was not in this program."

#### In Summary

So this is the story of "the house that youth built." It has been, in every way, a learning experience. We can look forward, we believe, as Mr. Jeffries does to an expansion, and a refinement of the program. It merits support throughout the industry and in secondary schools in many areas. It is important that our young people be given a choice to develop optimum skills, not all of which must be academic.



# 1970 EXHIBITION OF SCHOOL ARCHITECTURE

at the Annual Convention of the

AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS

Atlantic City, February 14-18

It is our pleasure again this February, and for the third time around, to bring *Symposia's* readers a glimpse of the fine educational facilities being constructed in our Western area. These buildings are "among those present" at the Annual Convention of the American Association of School Administrators being held this month, and selected from entries throughout the country. By agreement between the two sponsoring organizations—the A.A.S.A. and the American Institute of Architects, the jury is made up of four representatives from each group and selects the exhibit group from the many preliminary entries. The jury gives prime consideration to the architectural solution of the stated educational program requirements, and they

seek solutions which clearly reflect the challenge presented to the architect and how he met this challenge. Beatrix Sebastian, Director of the Architectural Exhibition, for the A.A.S.A., considers the 1970 exhibit particularly fine, "not only because evidence is coming through clearly of changes in school building planning, but also because we have been able to bring together with the cooperation of the Union Internationale des Architectes a special exhibit of new school buildings from eight countries outside the United States and with quite wide geographical distribution." *Symposia* wishes to thank Miss Sebastian, the A.A.S.A., and all our participating Western architects who have made this portfolio possible.

**ARCHITECTS: VICTOR HORNBEIN, FAIA and EDWARD D. WHITE, JR.**

## GRALAND COUNTRY DAY SCHOOL

Foundations Building/Denver, Colorado  
John Comfort, Headmaster

### Consultants:

Structural: Nedell, Locke and Associates

Mechanical: Marshall and Johnson, Inc.

Electrical: Sol Flax and Associates

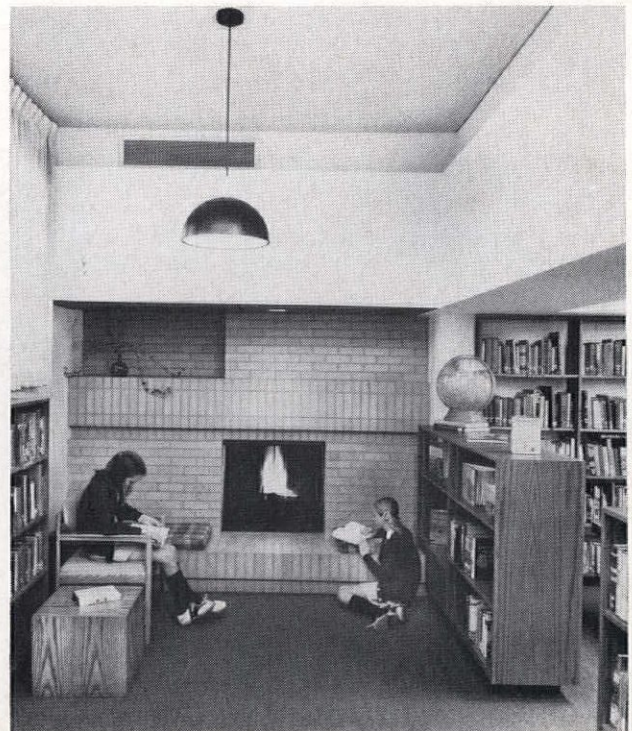
General Contractor: Gerald H. Phipps, Inc.

Cost: \$164,000—Area: 8,832 sq. ft.

Photographer: Milmoë

The new Foundations Building at Graland Country Day School is but a part of the work done on this facility by the firm of Hornbein and White. The new building which is constructed on two levels contains a combined auditorium/cafeteria on the upper level, the lower level housing the Instructional Materials Center. This Center has above-grade windows and opens into a landscaped sunken garden. As shown in the interior picture there is a browsing area with a fireplace and an outdoor reading court. The face brick exterior was selected to harmonize with other brick buildings on the campus—the interior walls are face brick and gypsum board with suspended ceilings of acoustic tile and plaster. Both resilient tile and carpeting are used on the floors.

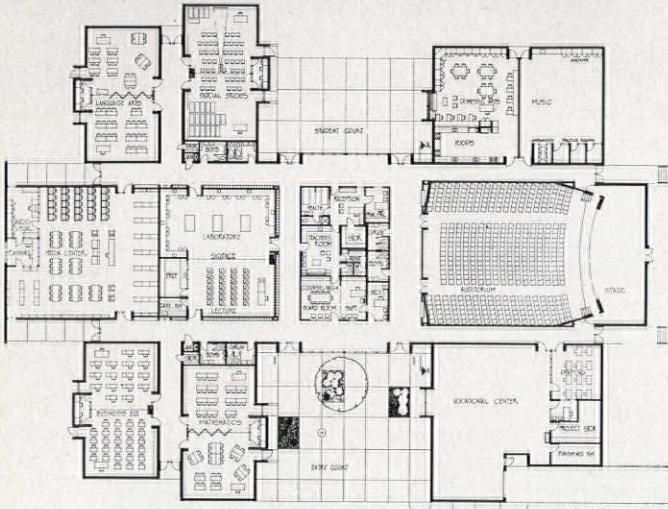
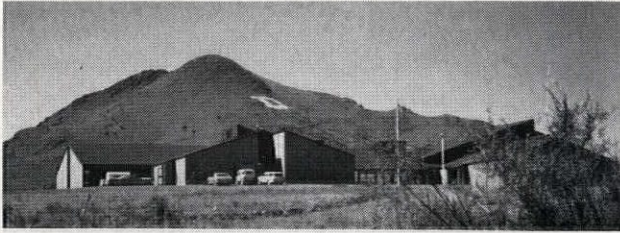
The exterior of this building which demonstrates its charming landscaped setting and handsome design is shown on our February cover.





**DEL NORTE SECONDARY SCHOOL**  
Rio Grande County District C-7

Del Norte, Colorado  
Orville Countryman, Superintendent



**ARCHITECTS: BOURN AND DULANEY, A.I.A.**  
Englewood, Colorado

Engineering Consultants:  
Structural: Kostroski and Wathke  
Electrical: Garland Cox  
Mechanical: Art Riley  
General Contractor: Morrison Construction

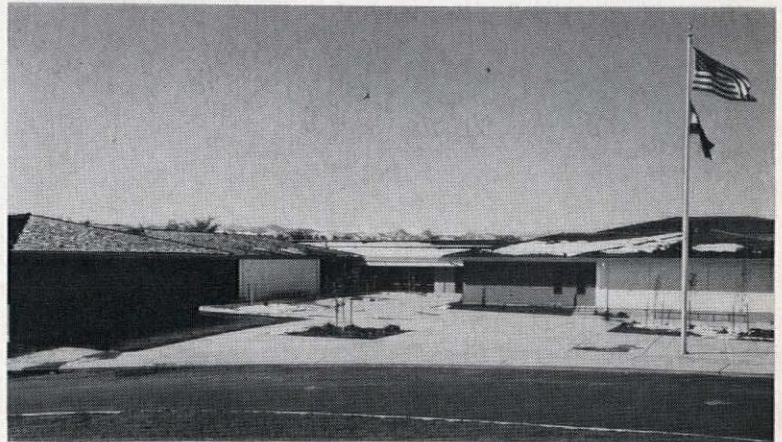
Cost: \$491,635.00  
(\$16.92 sq. ft.)

With an enrollment of 390 students (Grades 9-12), the new Del Norte High School replaces, in part, existing facilities. Money was not available to meet all needs and the new building provides for future expansion. Multiple class teaching and flexible scheduling were incorporated on a limited basis in an effort to individualize instruction within staff capabilities. Strong emphasis was placed on voca-

tional programs (exploratory and research) realizing less than 50 per cent of the graduates had a record of continuing their education at college level. Vocational specialization is available to students at a post-high school level in the County. Physical education and guidance are provided in existing facilities until future expansion is accomplished.

**ARCHITECTS: BOURN AND DULANEY**

Engineering Consultants:  
Structural: Kostroski and Wathke  
Electrical: Garland Cox  
Mechanical: Beckett Engineering  
General Contractor: I. P. Gregg

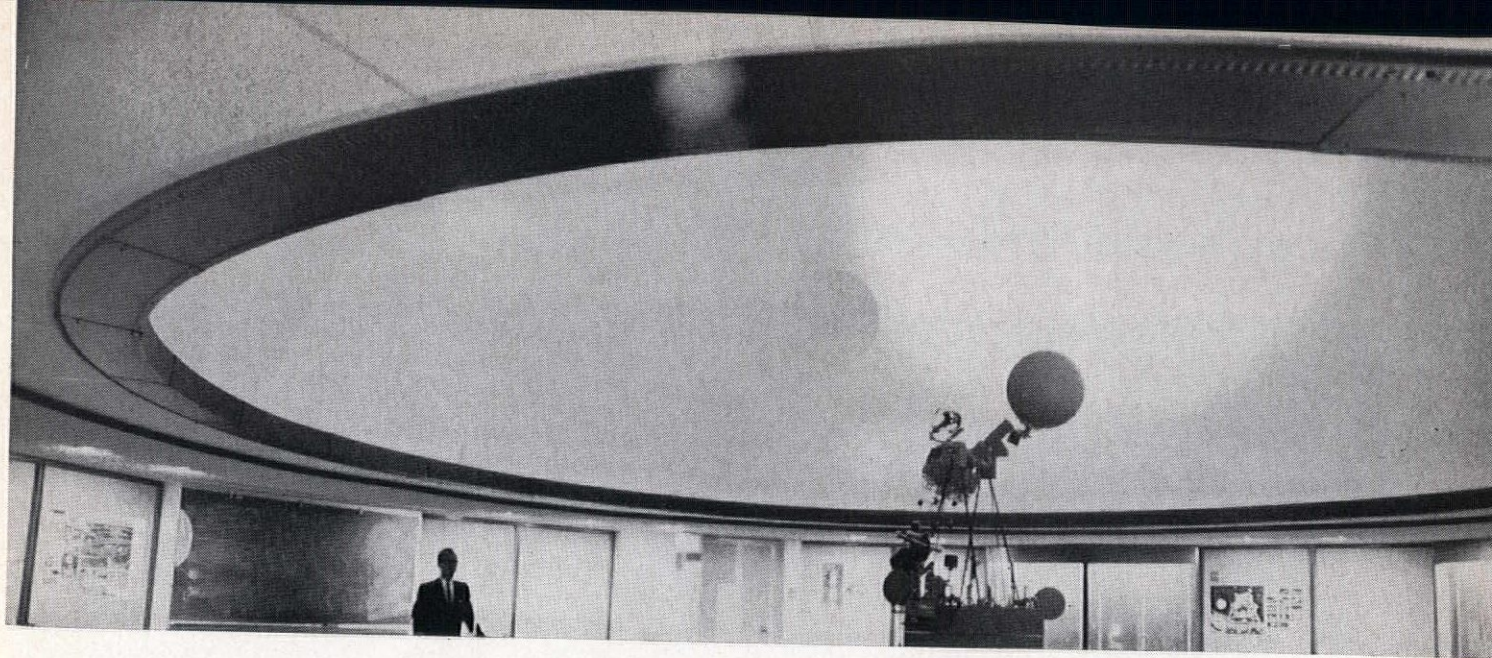


**DAMON RUNYON ELEMENTARY SCHOOL**/Littleton  
Arapahoe County School District 6  
Kenneth P. Schoonover, Superintendent

Littleton, Colorado's Damon Runyon Elementary School was designed to serve as a transitional building for a traditionally oriented School District wishing to experiment with team teaching, modular scheduling and attendant educational functions; the option of a return to the self-contained classroom philosophy was the principal criteria. The necessity of moving shared portable teaching equipment called for a single story structure, and no further expansion was planned not only because of the small site (7.25 acres) but the school district's wish to maintain elementary enrollments at their original designed capacity. Surrounded by upper middle income residences, materials and scale are in keeping with the environment and congruent with the architect's philosophy of designing non-institutional looking school buildings which encourage the occupants.

This elementary K-6 school was planned for 640 students at a cost of \$12.79 per square foot.





**ARCHITECTS: WHEELER AND LEWIS, Denver**

**Consultants:**

Mechanical: Beckett Engineering

Electrical: Carlen and Associates, Inc.

Structural: Russ Kostroski

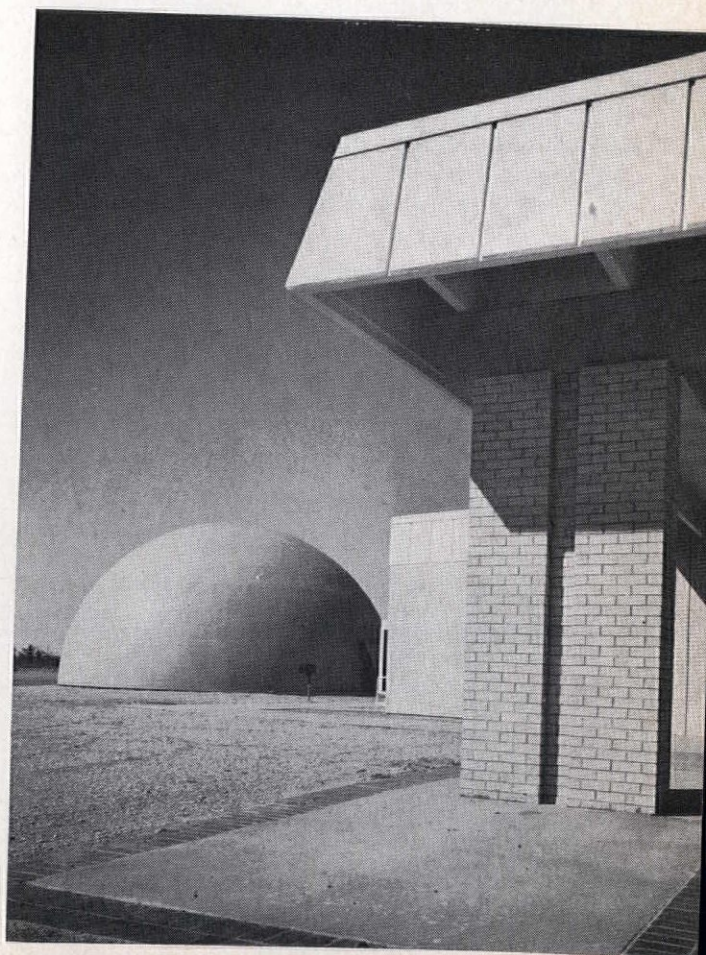
General Contractor: H. C. Flaugh, Cortez

Cost: \$1,600,000.00 (approx. 92,000 sq. ft.)

Our November 1968 issue of Symposia contained a definitive design study of this "nuclear age learning center" located in southeastern Colorado. Constructed to house 750 students, expansion was included as a part of the planning, and multi-faceted program has been implemented through flexible space considerations.

Some of the innovation found at Lamar includes a fitting room to prepare livestock for exhibition, a room which doubles as an automobile paint shop; in addition to the usual vocational arts curriculum, a Distributive Educational Department prepares students for work in retail merchandising, and, of course, the Space Science Center—a monolithic hemisphere which has become a Lamar landmark. Basic functions of this 80-seat space and solar science center are lecture programs, exhibit display arrangements with black-lighted cases and tack boards, demonstration arenas and planetarium projection. This facility is used widely by the entire district, and a staff curator plans and coordinates academic programs. In addition, the entire main academic area is designed as a fall-out shelter, including all known and recommended practices for nuclear age safety. Because of winds and temperatures, the school is also air conditioned.

**LAMAR HIGH SCHOOL, Lamar, Colorado**  
Alfred R. Young, Superintendent





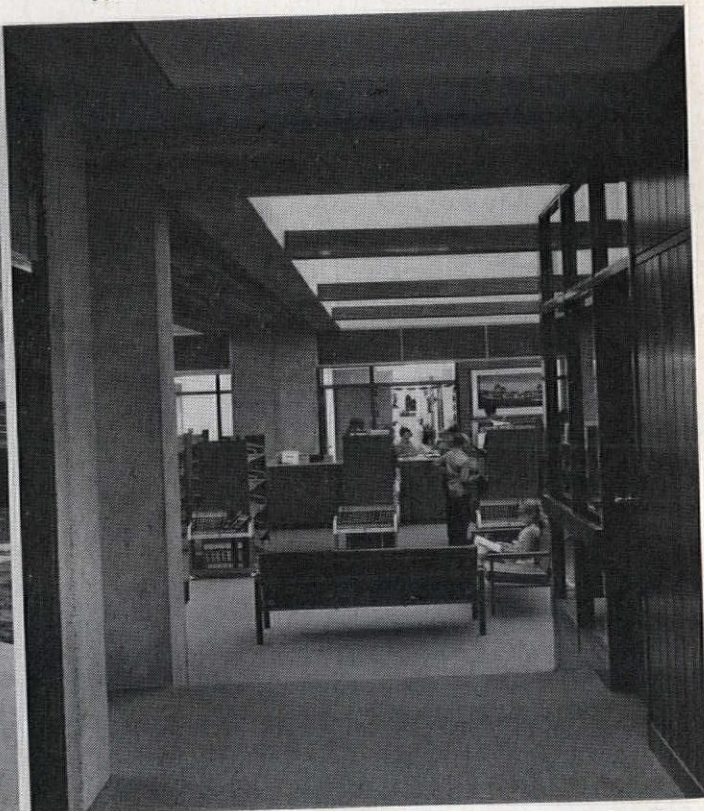
**ARCHITECTS: EDWARDS AND DANIELS AND ASSOCIATES**  
Salt Lake City, Utah

**ROBERT FROST ELEMENTARY SCHOOL—SALT LAKE CITY, UTAH**  
Elmer J Hartvigsen, Superintendent

Consultants:

Mechanical: Bridgers and Paxton  
Electrical: Intermountain Engineers  
Structural: Edmund W. Allen

Cost: \$975,000—Area: 51,183 sq. ft.



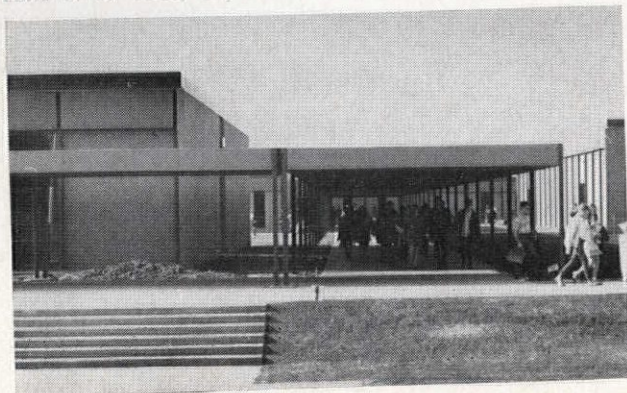
*Photography: Gordon Peery*

To facilitate the nongraded teaching program at the Robert Frost Elementary School, the entire central area is open and subdivided with partial partitions which can be removed and relocated to provide the required flexibility. Open areas are located directly adjacent to the central Resource Center, and teachers are provided separate preparation and work areas immediately adjacent to instructional spaces. The architect's flexibility of design has already been proven. Originally planned for 600 students, Robert Frost has a present enrollment of 750 and teaching programs are functioning well.

Sound level control is provided by segmented structural spaces within the interior, exposed beams and acoustically treated ceilings and carpeting . . . except in specialized "wet" areas. The low lines and pitched shingle roof fits in well with the residential site. Exterior paved playground and parking areas are located at different levels to provide visual and sound barriers between school and neighborhood.

Large covered areas are provided at the rear of the building making outdoor play possible during inclement weather. In addition to a special education room fully equipped to handle these needs, the architects have located a "kiva" or interior sunken area for story telling and instruction where steps are ranged in a semi-circular fashion adjacent to the kindergarten, first grade area.

**SENIOR HIGH SCHOOL/HILLSBORO, OREGON**  
Lane E. Du Bose, Superintendent



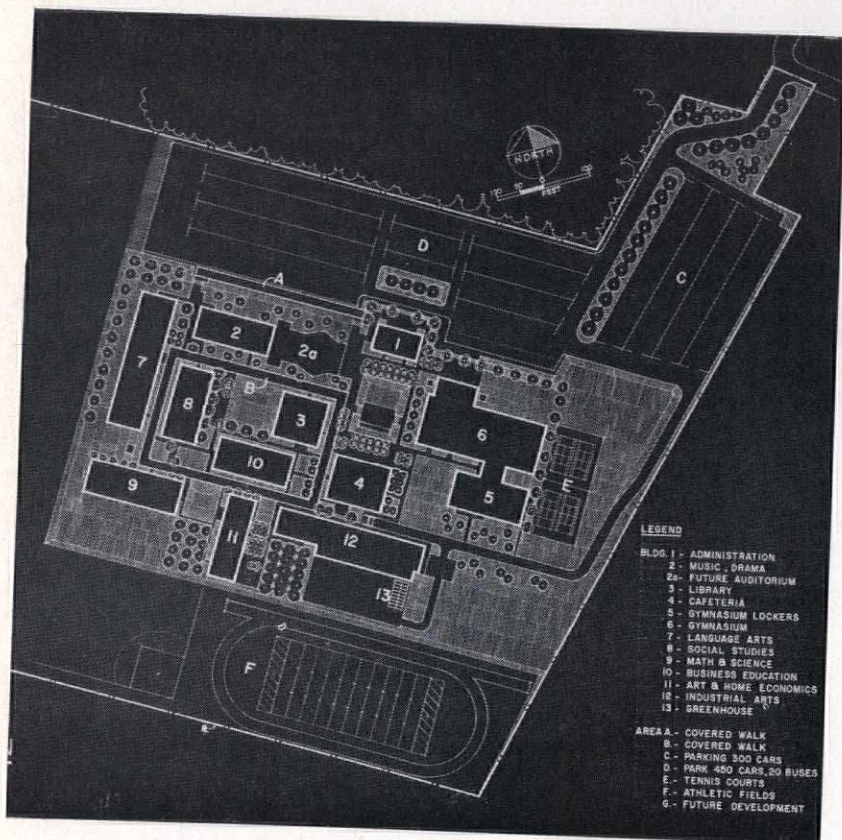
**ARCHITECTS: DE KANTER AND HOLGATE**  
Portland, Oregon

Consultants:

Structural: Cooper and Rose and Associates  
Mechanical & Electrical: Peterson Associated Engineers  
Landscape: Michael Parker/Mitchell and McArthur

General Contractor: Paul B. Emerick Company  
Cost: \$3,375,570.00 (\$17.45 sq. ft.)





The demand for a large complex (1,600 students) on a limited budget and the very short (8 months) construction time called for a special type of planning and construction. Each discipline had to be both flexible and expandable within itself to accommodate students of a growing district.

The combination of campus plan and "systems" approach accommodated all criteria. Rather than use a pre-built module, we (the architects) used a number of sub-systems. After pre-bidding a rigid frame steel structure, we knew what we had to work with in terms of duct space, insulation, fire requirements and erection time. The ceiling system was also pre-bid with a performance specification. With these sub systems as a known factor, all that was necessary was to add exterior walls and floor.

The campus plan, with its inherent flexibility, is further enhanced by a system which can easily be added to expand either or both ends of a building. Except in areas where flexibility is not desired, interior walls are all demountable.

The very large site of 48 acres offers ample expansion room . . . this lies to the left of the site plan as shown. This Hillsboro Senior High accommodates 11th and 12th grades only.

## McCORMACK ELEMENTARY SCHOOL

Eugene, Oregon

Millard Z. Pond, Superintendent

Beginning with an eight classroom starter unit, the McCormack Elementary School presented the challenge of phased construction. The phased transition to twenty-four classrooms was to be accomplished with a minimum of waste and a maximum choice of options. The architects based their planning on a firm belief in the following features or design concepts: (a) Internal circulation to any portion of the building by means of interior corridors. (b) An inside group play area near the primary wing large enough to accommodate one or two classes under supervision—this has been done before with happy results. (c) An outside semi-enclosed activity court which serves the dual function of play area and organizing spatial element at the core of the plan, and (d) Ample space in and adjunct to instructional areas. We place great emphasis on planning for large instructional spaces with adequate storage space convenient to the classroom.

(Photography: Kent Anderson)

## ARCHITECT: M. L. ROSENBERG

Springfield, Oregon

Consultants:

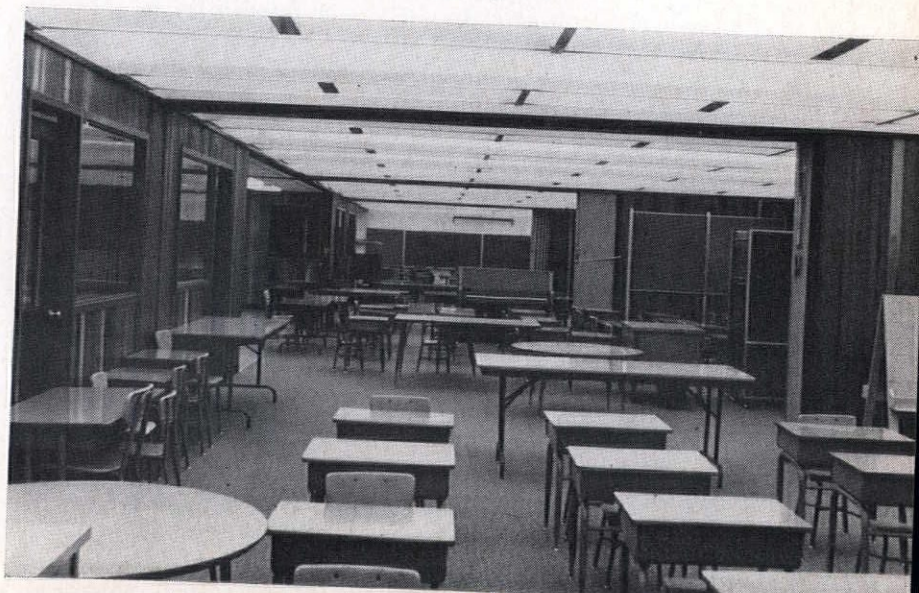
Mechanical & Electrical: Balzhiser and Colvin

Soil Engineer: Professor Bell

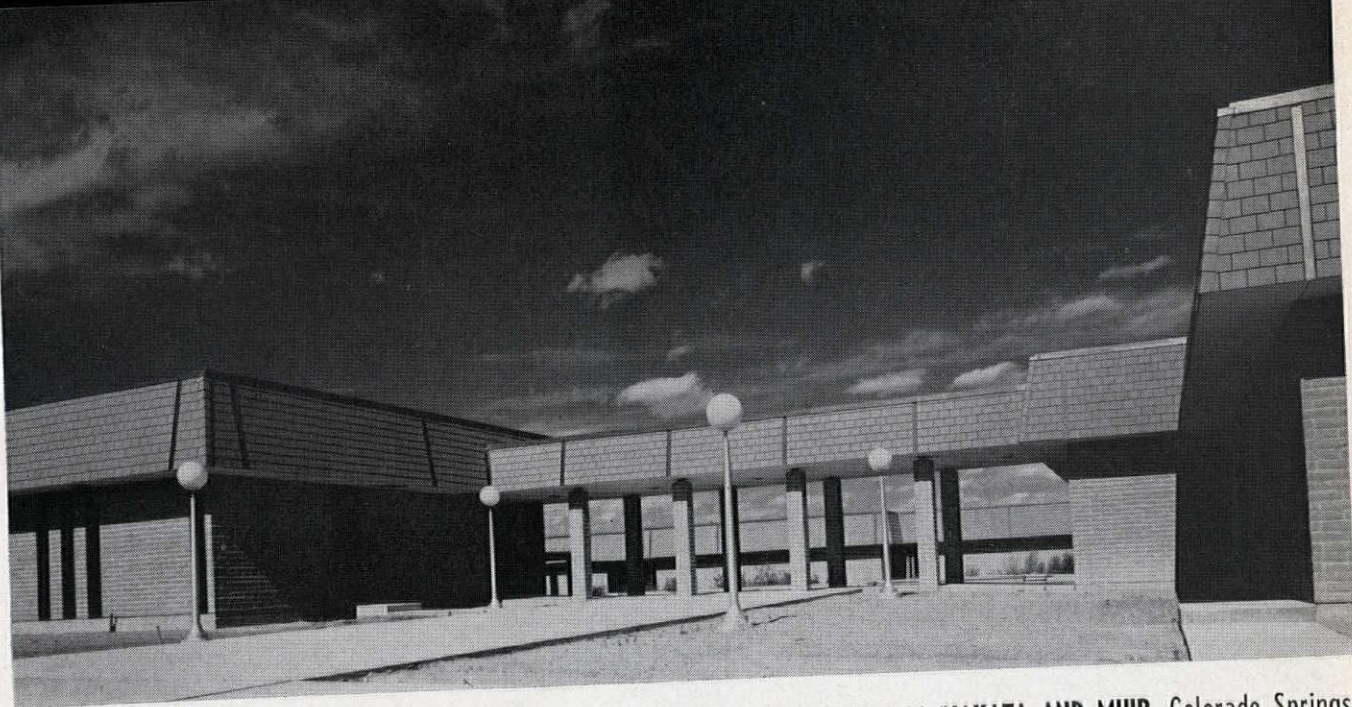
Landscape: Wallace M. Ruff Associates

General Contractor: J. E. Beck Company

COST: \$467,715.00 (\$14.30 sq. ft.)







**OLIVER WENDELL HOLMES JUNIOR HIGH SCHOOL**  
El Paso School District #11, Colorado Springs  
Thomas Doherty, Superintendent  
General Contractor: Bruce Hughes, Inc.  
Cost: \$1,087,931.00 (\$17.13 pr. sq. ft.)

**ARCHITECT: HIGGINBOTHAM/NAKATA AND MUIR**, Colorado Springs  
Consultants:

Structural: Howard C. Dutzi  
Electrical: C. Kenneth Kolstad  
Mechanical: Walter S. Langebartel

Designed for six hundred students—grades 7-9—Holmes Junior High reflects an anticipation of the increased use of team teaching methods by this school district. Major considerations along with flexibility were economics, expansibility, proper land utilization and a friendly architectural atmosphere consistent with the residential environment.

Buildings have been grouped by department in a quasi-campus plan around a student center court serving as circulation and visual relief. Interior spaces are designed flexibly so they may be rearranged as educational pro-

grams change. There are no interior columns in the academic, science, resource center and vocational arts areas. Cafetorium and gymnasium have no columns for obvious reasons. Thus, interior spaces may be divided by non-bearing partitions as the present program dictates with provision for maximum future flexibility. Facilities are divided into three major buildings—(1) Group assembly activities, gymnasium, cafetorium, music—(2) the “core” area . . . administration, resource center, academic spaces—(3) Vocational arts. All buildings are inter-connected by covered walks.

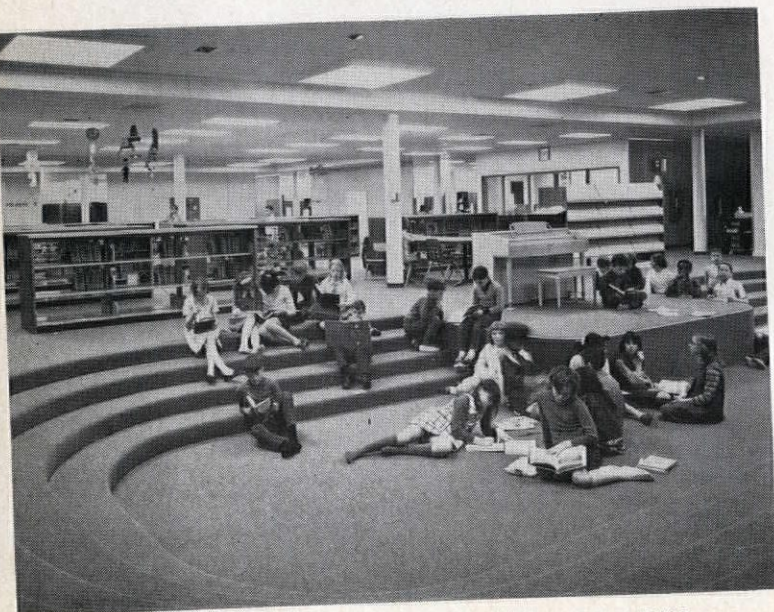
**MONTEREY ELEMENTARY SCHOOL**, Colorado Springs  
Harrison School District #2  
Wayne Bricker, Superintendent

**ARCHITECT: HIGGINBOTHAM/NAKATA AND MUIR**  
Consultants:

Structural: Reinking and Morgan  
Electrical & Mechanical: Swanson-Rink & Associates  
General Contractor: Highland Construction Company

Cost: Phase 1—\$426,817.00  
(\$13.23 pr. sq. ft. . . . Phase II: not bid)

Envisioned space divisible as needed by staff planning and student needs was the architectural concept used in this unusual elementary school plan. The educational program in this school district adjusts to the child and the media center becomes the focal point with immediate access from each group-learning area. The “Centrums” offer many opportunities for small or large group activities as well as “sprawling space” for free reading.



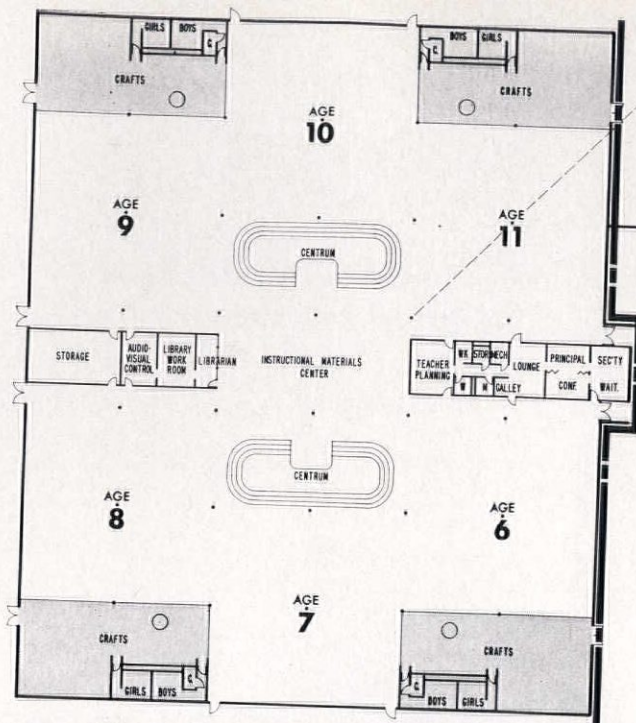


"Wet" areas for crafts, science projects and other activities are found in the four corners of the building. They are immediately accessible to every child, subject to informal supervision, and provided with the facilities for cleanup. For noise control, they are located at maximum distance from the media center.

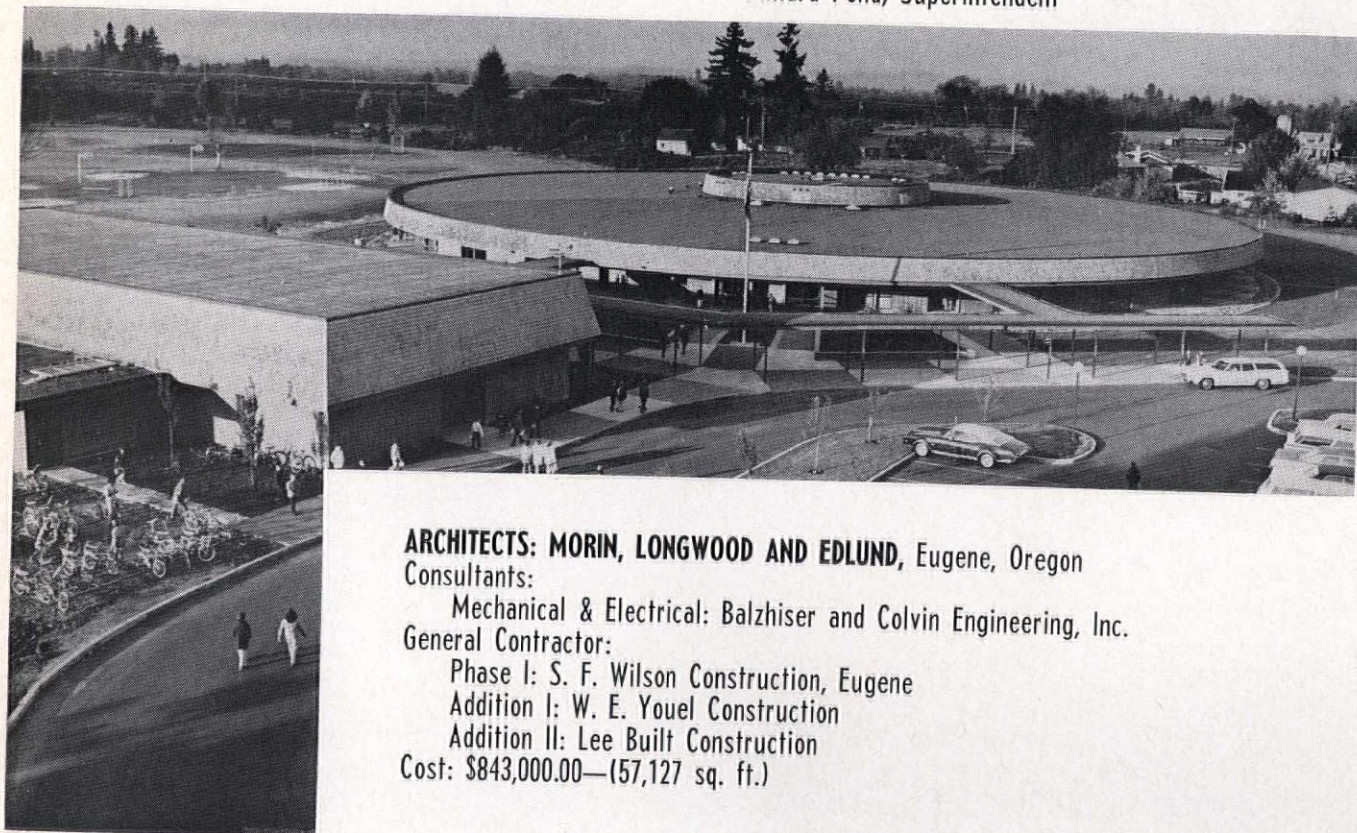
The second phase of the building plan for Monterey calls for a complex to the east which will house Physical Education; Music; Lunchroom-Kitchen; Kindergarten Laboratories and Storage.

The Monterey Elementary School occupies a 12.5 acre site with 4.5 acres set apart for an adjoining park. Student population is set at 720 pupils plus two kindergartens for 120 children. Staffing in this most progressive district includes the assignment of paraprofessionals to each group in addition to the teachers.

The architectural keynote in this District has been ACCESSIBILITY.



**AWBREY PARK ELEMENTARY SCHOOL, Eugene, Oregon**  
Millard Pond, Superintendent



**ARCHITECTS: MORIN, LONGWOOD AND EDLUND, Eugene, Oregon**

Consultants:

Mechanical & Electrical: Balzhiser and Colvin Engineering, Inc.

General Contractor:

Phase I: S. F. Wilson Construction, Eugene

Addition I: W. E. Youel Construction

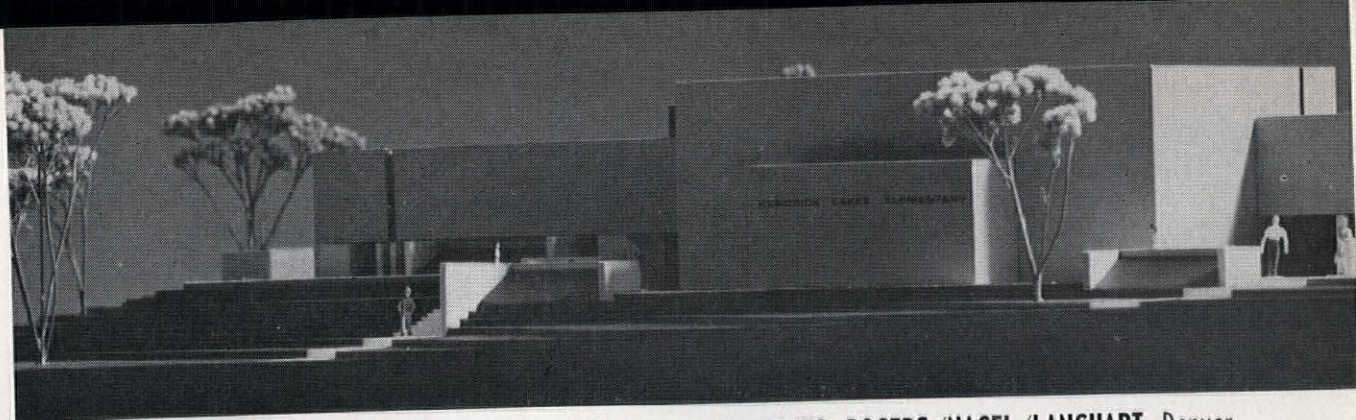
Addition II: Lee Built Construction

Cost: \$843,000.00—(57,127 sq. ft.)

Graphics: Robert Lindsay and Associates

Built in three phases, the Awbrey Park Elementary School couples a round academic building with classroom spaces surrounding the Resource Center core with a separate structure housing Gymnasium and Multipurpose area. Classroom units are designed to produce maximum flexibility with folding partitions and movable equipment making it possible to bring one, two or three rooms together into a single teaching station. Carpeting has been used in academic areas and resource center; there are minimum glass areas and the facility is air conditioned. Separated to assure acoustical control and the opportunity for future expansion, gymnasium and multi-purpose areas are tied to the academic unit at the administration area by covered walkways. These spaces are located adjacent to public parking and playfields.





## KENDRICK LAKES ELEMENTARY SCHOOL

Jefferson County, Colorado—District R-1  
W. Del Walker, Superintendent

**ARCHITECTS: ROGERS/NAGEL/LANGHART, Denver**

Consultants:

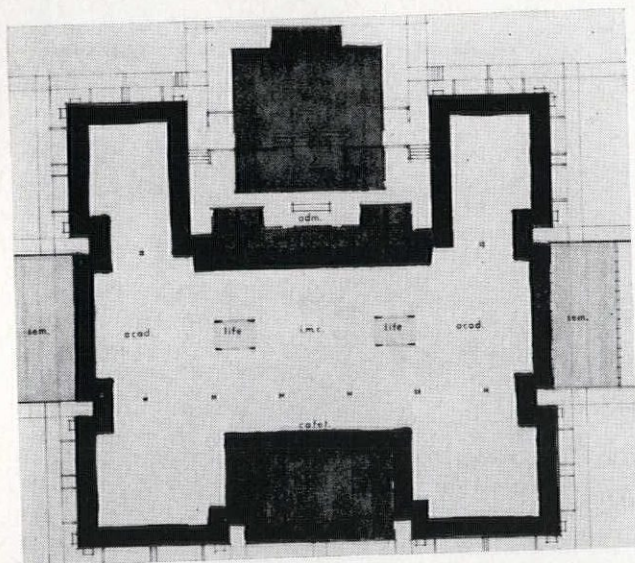
Mechanical: Kennon B. Stewart

Structural: E. Thomas Punshon

Electrical: Charles E. Bell

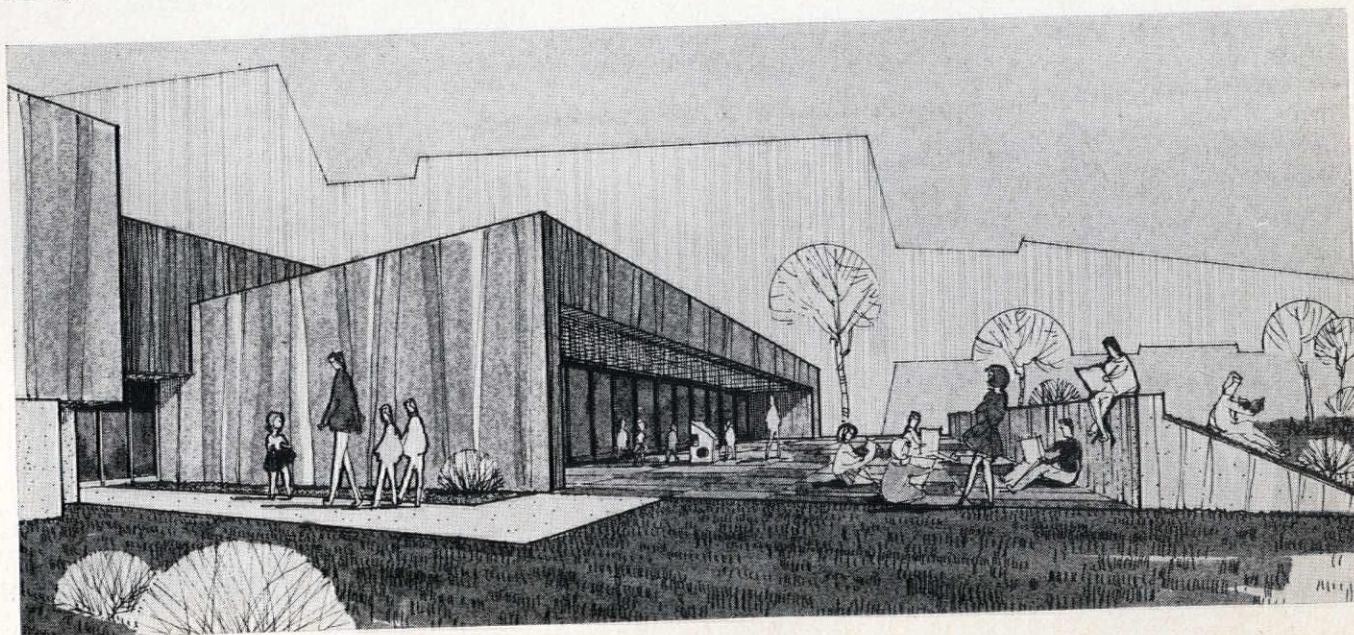
General Contractor: Webco Construction Company, Inc.

Cost: \$607,958.75 (40,797 sq. ft.)



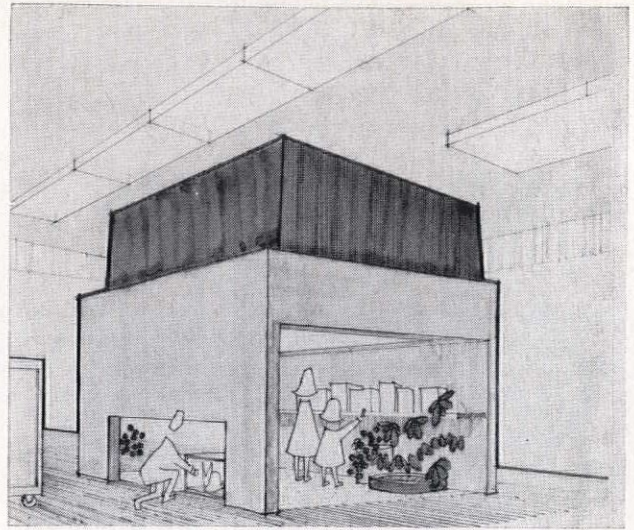
The "open" floor plan for Kendrick Lakes—dark area at the top is the gymnasium—toilets and administration are located immediately below; kitchen, custodial space and toilets at the bottom. The gray areas are the "closed flexible spaces."

We have more than a nodding acquaintance with Kendrick Lakes—we have known this school since it was a mere twinkle in the On-Site Design Team's eyes, and its beginnings were duly reported in the October, 1968 issue of *Symposia*. Designed for 702 K-6 students, Kendrick Lakes represents something of a departure even for this most innovative school district. First: Kindergarten, Art, Seminar and Instructional Staff areas, which have needs for a space with different quality from academic space (hard surface flooring, for instance) are grouped together into "closed flexible spaces" located immediately adjacent to the academic space and have interior partitions which can be adjusted to required needs. Second: area for a space to eat exists within the academic space and can be located as preferred (no separate lunchroom as such), and third: two areas for life study are provided within the academic space which allows sunlight to penetrate the building interior.



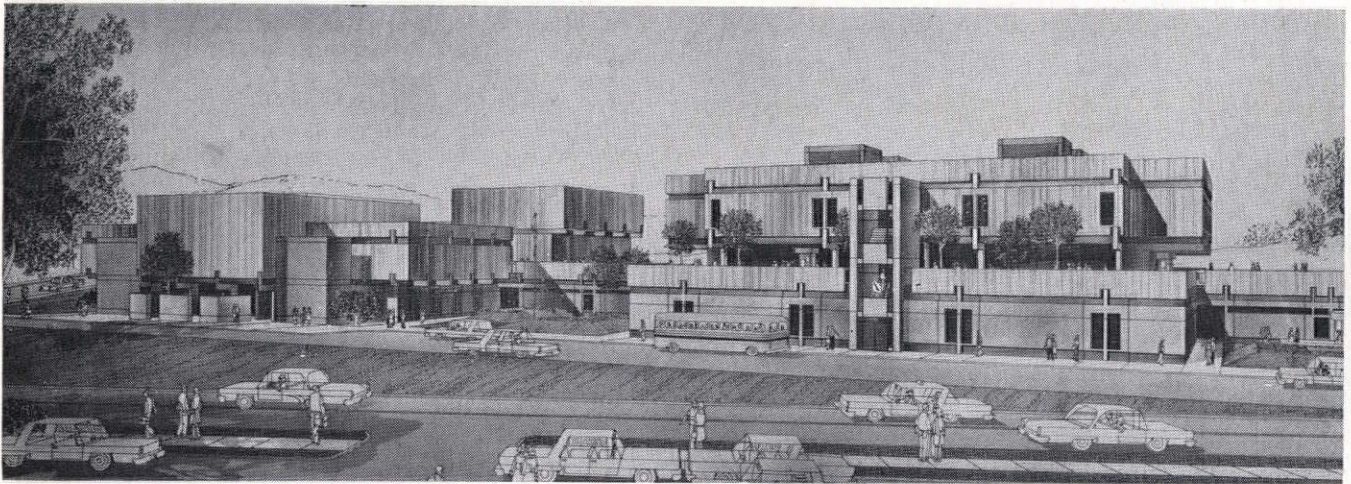


*This is the sky-lighted "Life Study" room (one of two) at Kendrick Lakes Elementary School. All essentials from sunlight to tile flooring make possible plants, fish—even small animals—a delightful place for the K-6 age pupil.*



## ARVADA SENIOR HIGH SCHOOL

Jefferson County, Colorado—District R-1  
W. Del Walker, Superintendent



**ARCHITECTS:** ROGERS/NAGEL/LANGHART, Denver

General Contractor: F. R. Orr Construction Company, Inc.

Cost: \$4,009,751.00 (214,020 sq. ft.)

2,200 students—Grades 10-12

**Consultants:**

Mechanical: Kennon B. Stewart

Structural: Jack D. Gillum and Associates

Electrical: Fred J. Calvert and Associates

Acoustical: Bolt-Beranek and Newman

Three separate structures, each containing related disciplines, are clustered on the 35-acre suburban site. By this grouping of like functions together, better communications, traffic flow, joint use of facilities and control is afforded.

On the lower level of the Public Building the main gymnasium floor is located with some folding seating. A lobby separates gym from the cafeteria which seats 575 students, a faculty staff dining room, and adjacent is the 150-student-capacity student center. The attendance office and other administrative functions are located off the lobby, and guidance counsellors' offices surround a resource center. On the upper level, fixed seating is provided for athletic

activities; there is an auxiliary girls' gymnasium, an auditorium seating 750, instrumental and vocal music rooms, and administrative staff area including faculty mail room.

The lower level of the Academic Building houses science studies, science resource center, foreign language sections, business education classrooms and the math computer room is included here because of the relationship to both science and business. On the main level is the instructional materials center with book stacks located in the center; math, social science, language arts surround this core—flexible spaces containing both seating and rolling cabinetry. The upper level of the Academic building contains flexible

classroom spaces for language arts, math and social science.

The Arts Building groups areas required for art, industrial arts and home economics programs providing a good cross stimulation of ideas and joint use of equipment is achieved. A screened courtyard adjacent to the art building is provided for outside work.

These three major spaces of the building complex are connected by two student locker corridors and an exterior walkway. The exterior courts formed by corridors and building are developed for student use; sod terraced banks, sculpted from earth, provide visual interest and seating.

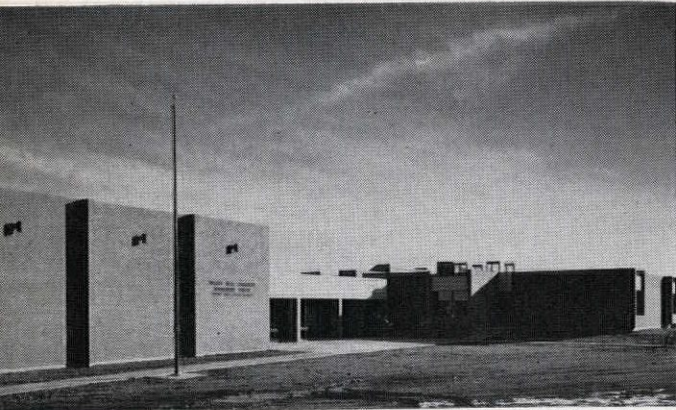


## WALNUT HILLS ELEMENTARY SCHOOL

Arapahoe County, Colorado

Cherry Creek School District

Dr. Edward C. Pino, Superintendent



Photography: Daniel Ilko

**ARCHITECT: WILLIAM C. HALDEMAN, Denver**  
Consultants:

Structural: Lovell-Osnes-Nesbit

Mechanical: Beckett Engineering

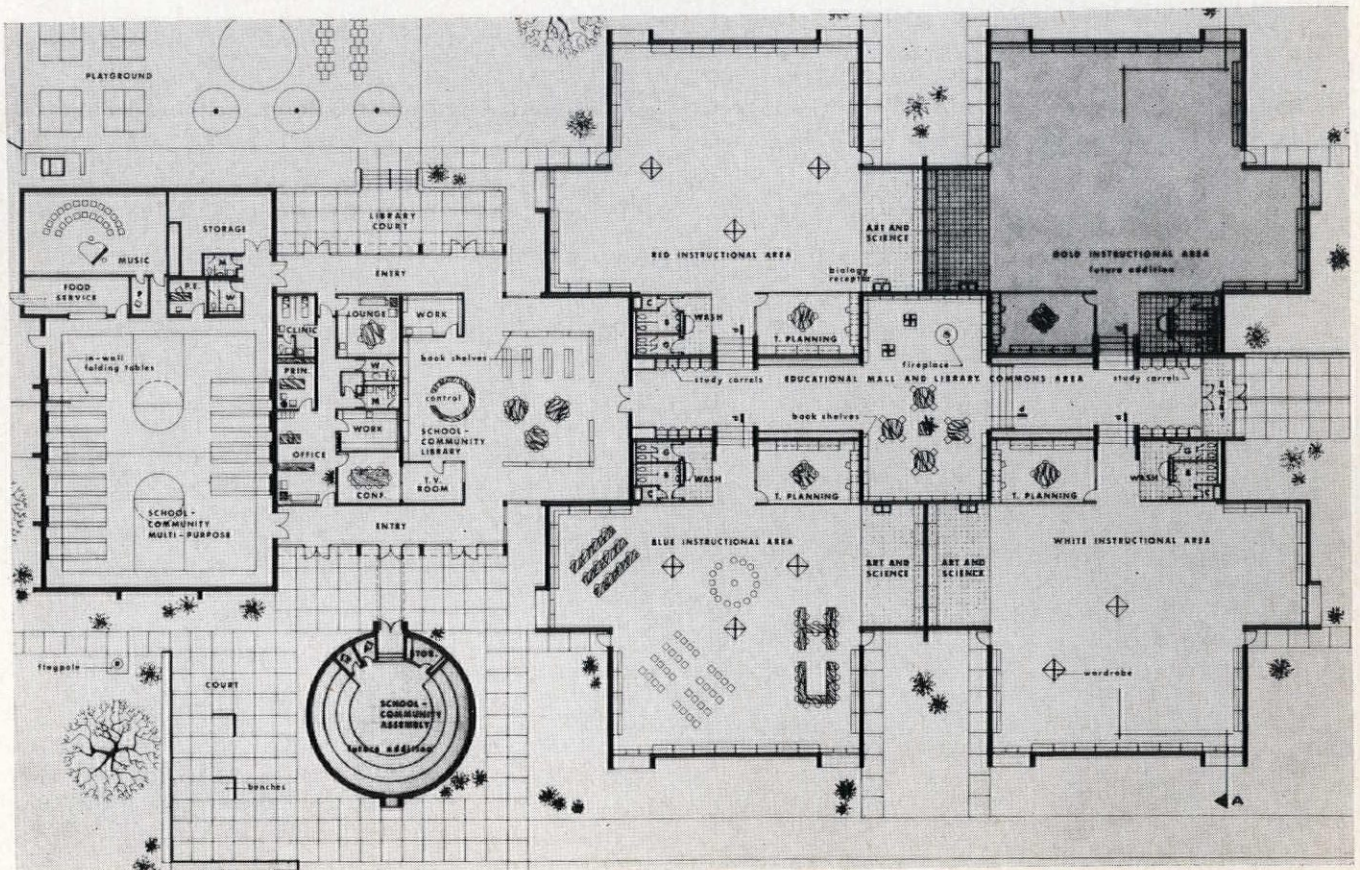
Electrical: Behrent Engineering

The Walnut Hills Community Elementary School appeared as one of the finalists in the recent S.C.P.I. Awards Program in Colorado. It is the result of a coordinated design team of architects, administration, parents-teachers working in cooperation and faced with the challenge of an elementary school design for 600 students in an essentially residential suburban community.

In spatial concept—it is open with new educational methods of team teaching and ungraded classes in mind. However, complete flexibility has been included to provide areas for future teaching concepts—or even a return to conventional classroom space. The building is irregular in both perimeter and roof line to effect variety in spatial experience, sun and shadow, and to produce not only the desired residential but also the child-size scale. Advantage was taken of the sloped site by stepping the building down to keep masses low and to provide an interesting change of levels within the interior.

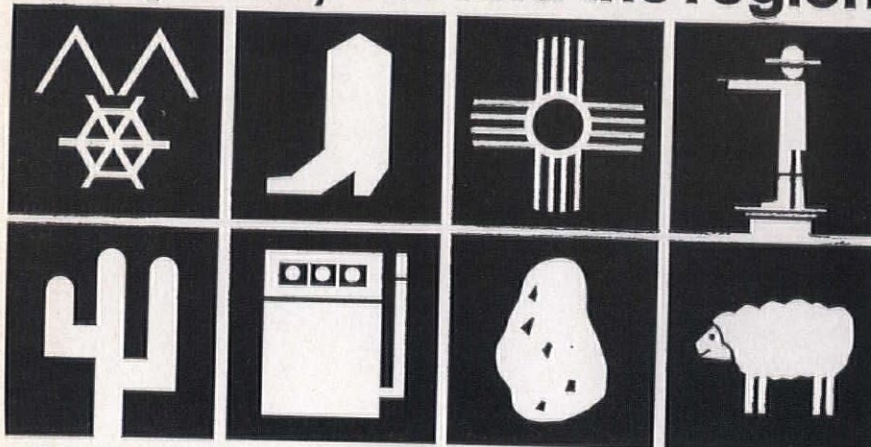
The facilities have been further designed to serve the Walnut Hills Community for such functions as community library, music, Little Theatre groups, sports and recreation activities.

Mr. Haldeman's design has been selected by the A.A.S.A. as one of the schools to be featured in the 1970 Film Strip prepared each year from outstanding educational facilities submitted from throughout the United States.





# symposia/around the region



## colorado

### The Bright Side!

Denver's bright red-white-and-blue SMACNA newsletter points up the fallacy of the thinking of some members of our Industry who feel we are about to sail off "the end of the world." We would quote from their January issue . . . "We are about to be launched into the Soaring Seventies. According to most local reports, construction in our area should be above the national average."

Just in office buildings alone, SMACNA cites some 15 buildings—three of which are 50 stories or better—which are proposed, on the boards or under construction. The newsletter continues . . . "Martin, Gates, I.B.M., Kodak, Monsanto and many other large corporations are continually expanding their facilities. The development of industrial parks such as the Broomfield and Montbello areas are only the beginning of smaller industries moving into the area. Stapleton Field seems to be in continuous expansion, and the airlines are also continually adding to their facilities. Denver, reputed to hold the second greatest number of federal offices outside of Washington, will certainly see considerable expansion in federal office and laboratory projects.

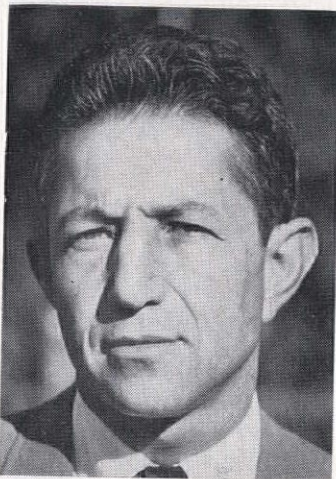
"The Ski Industry in the state has made it important to ski in Colorado, thereby attracting thousands of temporary residents needing housing and facilities.

"The first apartment housing complex to be built under the 'Operation Breakthrough' program of HUD will be in Denver. We, in being first, will certainly be in serious contention for more projects of this type.

"Our colleges and universities seem to be continuously short of facilities, especially the state institutes such as C.U., C.S.U., C.S.C., etc.

"These are only a few indicators of the construction work which will be

available early in the seventies." So, cheer up, fellas, it's a great new decade!



Marvin Hatami, A.I.A.

### Skyline Cited

Architect/Planner Marvin Hatami of Denver keeps getting new feathers for his cap—it will not be long until he will resemble nothing so much as a Sioux war chief. His latest laurels come from *Progressive Architecture*, and are for the Hatami design for "Skyline," Denver's Urban Renewal Project. PA's panel of experts is headed by Thomas Vreeland (U.C.L.A.), formerly of New Mexico University who stated, "This, of all the urban design schemes submitted, is probably the one that most reflects a long and arduous struggle on the part of the designers to submit to the crucible of city politics and business reality and emerge determined to retain design integrity."

Ground has already been broken for the first of Skyline's projects — the Prudential/Del Webb complex designed by Flatow-Moore-Bryan and Fairburn/Albuquerque, and Bob Cameron who heads Denver's Urban Renewal Authority promises more to come with a Press Conference etc. scheduled for January 31.

## Happy Birthday, Pikes Peak!

And we don't mean the mountain—we mean that great group, the Colorado Springs Pikes Peak Chapter of the Construction Specifications Institute! These nice people saluted themselves, and well they might, at a gala First Birthday Party on January 27th held in the dining room of the Satellite Condominium Apartments. Invitations were mailed to the home addresses so the ladies would know that they were very much included. Friends from Denver and special guests from Colorado Springs were also on hand. This Pikes Peak Chapter contains so many of our favorite people that you can be sure—the Symposia team sang "Happy Birthday" louder than any body!

### Parrot New Bunts Associate

Colorado Springs Architect, Edward L. Bunts, AIA, has announced that H. Marty Parrot has become an Associate of that firm. Mr. Parrot was cited for his ability and performance during his plus five years with the firm where he has been actively involved in all phases of the practice. Marty is a native of Ohio, a graduate of the University of Michigan, and prior to moving to Colorado Springs, he was for seven years with the architectural firm of W. B. Huff and Associates of Akron, Ohio. A professional Associate member of the Colorado South Chapter of the American Institute of Architects, Marty Parrot is also a member of the Pikes Peak Kiwanis Club and the First Congregational Church. He is married and he and wife, Jeanne, are the parents of six children. Congratulations are in order to Mr. Parrot on this advancement in his profession!

## idaho

### Semi-Annual for C.E.I.

According to our new Editorial Board Member, John Hoffmann, President of the Consulting Engineers of Idaho,



the "really big" Semi-Annual C.E.I. Convention has been scheduled for the 5-6 and 7 of February at the Boise Hotel in Boise, Idaho. This is being held in this new year in conjunction with the Idaho Society of Professional Engineer's Convention—and indicates, in some small measure, the interest of these two groups toward establishing closer liaison in the future. Mr. Larry Spiller, Assistant Director of the Consulting Engineers Council/U.S. will be on hand to speak on the problems facing the Consulting Engineer in the year 1970. Topics up for discussion include Unionism, a single national organization to represent consulting engineers, competitive bidding, Government infringement in private practice and fee schedules. Scholarships will also be discussed. Since Mr. Hoffmann was so recently introduced to Symposia's readers—January, 1970—"Take Me To Your Leader"—we have endeavored to bypass verbosity, and welcome him without the usual "Symposia's Presents" article. This does not in any way diminish our pleasure in having him as a member of our Editorial Advisory Board. This dedicated group of Industry leaders have contributed significantly to our coverage and to our understanding of the community which we serve. We would wish to make at this time a public acknowledgment of our debt to Mr. Hoffmann and to his distinguished colleagues. It is great to have Mr. H. as a new member of our "Symposia family."

## montana

### Environmental Conference

A great report this time around from our Man in Montana, Cal Hoi-land. On page three, he finally admitted that he had really only intended to say "hello" and "Happy New Year," but if he quit "I'll have to write a set of specs, and I'd rather not think if I can do anything else. That's called procrastisomething." But—to the Hoiland Report.

"On January 9, I attended an Environmental Health Planning Conference in Bozeman which reflected the current public concerns in ecology and conservation. Led by State Representative, George Darrow (Chairman of the Governor's Advisory Committee for Environmental Health) and Mrs. Henry Bugbee, a member of his committee, the meeting was great and touched on most of our current efforts to destroy ourselves."

"Altogether about forty people at this first meeting, including thirteen students of architecture, five architecture faculty, two architects, two state

legislators, three or four engineers, some planners and other interested citizens. Each spoke for about five minutes on their view of the problem, and discussion, dinner and talk followed for hours. Most agreed that the problem was due mainly to population explosion but there were several ideas on what all these people are doing to ruin the urban environment."

"Air, water and soil pollution were set aside as general and primary areas of concern. From there on we touched on Solid Waste Disposal, Noise Pollution, Visual Pollution (architects always like to blast the signboard people) and traffic saturation in the cities. Don't think we solved much—but we did arrive at a starting point for 1971 legislation and an interest in further discussion. Legislation will probably be aimed at maintaining the existing level of purity of water, soil and air, with no further pollution accepted. Except for Missoula, which can be cleaned up under existing law, the present Montana levels are not bad—especially the further you are upstream!"

### MSU Lincoln Project

Rather than close the barn door after the horse is long gone is the aim of upperclass architectural students at Montana State University. Under the guidance of faculty members, Doug Rand and Jay Lynch, the students are "urban planning" the town of Lincoln, Montana. Eighty miles from Great Falls by good road, Lincoln today only has a population of about 150 people. However there has been a big new copper strike which Anaconda will probably begin to develop in the summer of 1970. If the geological info is correct, Cal says, the town will boom to about 20,000 population within the next couple of years. Everyone forecasts a monstrous shack town with no permanent development except the mine. MSU Students hope to prepare an urban plan clear enough for even a mining camp to follow. Cal also adds that Lincoln is perched atop the Continental Divide at about 7,000 feet, is presently a logging town and holds the U. S. record (a dubious honor, say we) for cold . . . —70 (brrrr!) set in about 1957.

### Big Mountain Meeting

A late flash from Jim Stephens, Chairman of the AIA Winter meeting at Kalispell includes the very last word on this frolic in the snow (with business on the side). Scheduled for January 16/17, our report "after the fact" will have to come later, but their projected plans sound really great. A couple of snowmobiles were

lined up for the non-skiers, Ray Thon took care of this, and an interesting movie was booked should the weather close in on the Mountain. Movie may be shown anyway, even if the weather is "its usual beautiful self" — the title "Urban Projection."

The Awards Committee for this Winter meeting included Bruce M. Walker, Richard Taylor and James Gough. There was, of course, business — a meeting was scheduled for 8:00-10:00 on Saturday morning (presumably the lifts open at ten), and the Board of Directors will meet at 3:00 p.m. on Friday (presumably the lifts close at three).

Speaker for the Friday banquet was Bruce M. Walker of Spokane, Washington. Mr. Walker is an architectural graduate of the University of Washington with a Master's from Harvard. He has won many regional and national awards, and is well known throughout Montana. Architectural students from Montana State presented their "Lincoln Project" following dinner on Saturday.

Oystein Boveng of Kalispell has headed up the Host Chapter arrangements.

## nevada

### New Project/Reno A.I.A.

This good word for our smiling Symposia mailbox comes from Board Member Ed Parsons of Reno.

Joe Harden is the chairman of a new project undertaken by the Reno Chapter of the A.I.A. working with Explorers: 30 young men in Reno High Schools who are meeting with a committee of architects bi-monthly to learn about the practice of architecture.

Helping Joe are Ralph Casazza, Maurice Nespor, Rodger Simpson, Jr., Bob Simpson, Gail Richie and Ed Parsons. This program is aimed toward helping these young men find themselves and to give them guidance in preparation for college. The boys will elect their own officers and choose their own programs. Contemplated are field trips, visits to architect's offices, lectures and meetings with boards and commissions related to building.

Ed tells us they have held three meetings to date and that Reno's architects are most enthusiastic over the sincerity of the young people involved.

### A.G.C. Annual Meeting

February 7th is the date set by the Nevada Chapter of the Associated General Contractors of America for their Annual Convention. Highlight of this meeting is always the presentation of the SIR Award which is



given each year as special recognition to outstanding Nevadans who have made an unusual contribution to Nevada's Construction Industry. Nevadans in both public and private life are eligible for this award and nominations may be made by any Nevada citizen. The SIR award, adopted from the initials of the A.G.C. slogan, Skill, Integrity and Responsibility is a fifteen-inch gold statuette modeled from the Norman Rockwell painting, "The Spirit of Construction."

1970 Officers for AGC/Nevada are as follows: Mel Moody, President; Carolo Panicari, First Vice President; Sam Savini, Second Vice President and James Teipner, Jr. who will serve as Treasurer. Directors are Marv Byars, Grove Holcomb, Harry Lemon and Keith Stone. Ex-officio Directors include Bud Meneley, Roger Powell, Gerald Manson, and Robert Kennedy with Tom Donnels and E. W. McKenzie who will continue as Ex-officio Directors during 1970.

## new mexico

### Alva Coats Retires

New Mexico's Building Industry and most particularly the Building Branch

of the Associated General Contractors will certainly miss long-time manager, Alva J. Coats, who has retired.

In 1947 Mr. Coats helped to organize the Associated Building Contractors who were chartered by the National A.G.C. in November of 1948 as the New Mexico Building Branch. As its first manager, he worked first from his home, moving twice to office locations until 1965, when the present facility at 1915 University Boulevard, N.E., was acquired. Throughout his twenty-one years of service, Mr. Coats has been an effective lobbyist for the construction industry during sessions of the State legislature. He has contributed significantly toward making A.G.C. a viable spokesman for the industry where construction is a major economic factor.

Mr. Coats, always vitally interested in the apprenticeship and pre-apprenticeship training program, realized a dream when the training building was completed on the A.G.C. site in 1969. There, classes are held for apprentices and pre-apprentices in the building crafts.

Mr. Coats has been succeeded by David M. McCoy, former manager of the Las Vegas office of the Nevada A.G.C. Chapter, where his duties were concerned with labor relations, labor

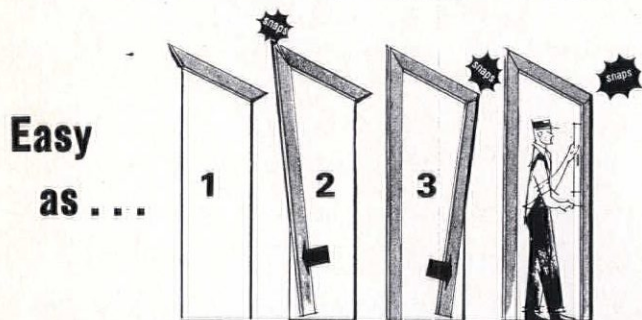
negotiations and membership development.

### Albuquerque Architect Dies

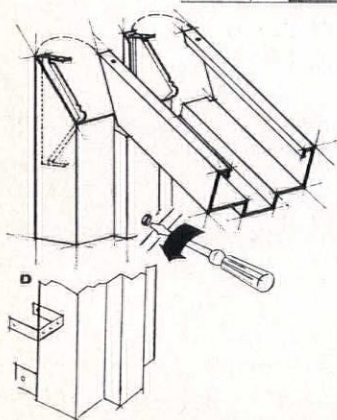
Members of the architectural/engineering/construction industry throughout the region will be sorry to hear of the passing on January 7th of a most esteemed member of the profession, W. Miles Brittelle, Sr., of Albuquerque. Mr. Brittelle held License Number 2 in New Mexico and was the first Chairman of the New Mexico Board of Examiners for Architects... serving in that capacity for six years. A member of the American Institute of Architects from 1946, he was Treasurer, Vice President and President of the New Mexico Chapter. He was always active on the magazine committee, and was to have received an AIA State Society "Citation of Service." Born in Imperial, Nebraska, in 1894, Mr. Brittelle received his architectural training in the office of Harry James Manning in Denver, attending the Denver Beaux-Arts Atelier. From 1923-'26, he was with the W. W. Stickney firm in Pueblo, with George Williamson in Denver from 1926-'31, and he spent a year with Trost and Trost of El Paso before moving to Albuquerque in 1932 as a principal in the firm of Trost, Trost and Brittelle. In 1934, the firm became Brittelle and Ginner.

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He retired from active practice in 1962. The architectural firm continues with his son, W. Miles Brittle, Jr., as one of the principals. In addition to his AIA activities, Mr. Brittle was a member of the Church Architectural Guild of America, a Past Commander of American Legion Post 13, Past President of the YMCA Board, a member of the Elks Lodge 461 and a Scottish and York Rite Mason and a member of the Ballut Abyad Shrine. Brad Kidder, FAIA, of Santa Fe, who has known Mr. Brittle for many years, writes . . . "There is not much more to tell. 'Britt,' as he was known, was a most active worker in the A.I.A. When it came to getting things done, he was outstanding. To say that he will be missed is to put it bluntly but truthfully."

## oregon

### Economic Evaluation

It's "Excedrin Headache" time, fellas, according to the latest from the Northwest Region. Read 'em and weep!

"In the Northwest Region, the tight-money and high-interest-rate economic situation has (and is still) affecting architectural offices. The state of Oregon has a statutory limitation of a 7 per cent maximum interest rate on all State, City and School District Bonds, and as a consequence a good number of bond issues for schools and public buildings may be in jeopardy. One bank recently bid in a school bond issue at 6.9999 per cent. There have been numerous layoffs of architectural office personnel due to shrinking construction programs, and evidence of this fall-off is the competitiveness of contractor bids on projects."

"The small architectural offices generally are the ones being hurt by the tight money situation, and if these inflationary controls continue, it will badly affect all of Oregon and its lumber-based economy. Building permits throughout Oregon were down the last half of 1969. Governor Tom McCall has ignored the pleas of the Nixon Administration to cut back on all state public works and highway construction because of rising unemployment and increasing welfare payments within the state."

(We must note here that despite the "rending of garments" by our Oregon correspondent, many states report an upsurge of activity, much work on the "boards" and a very real shortage of manpower.)

### Urban Renewal

Portland: The Portland Chapter of the AIA is in the midst of a battle to head off the construction of a 12-story, one-block-square parking structure in the

heart of downtown Portland, immediately across from the neo-classic old post office. Round One has been won with a denial by the City Planning Commission, but akin to all city governments, the City Fathers have the final say! From all indications, downtown merchants will prevail and create further automated congestion and air pollution. (Shades of the great Portland planner, Lewis Crutcher, who for so long has been the voice in the wilderness, crying . . . "the heart of the city should be a place for people—for beauty—not for automobiles—but for people!")

Eugene: Eugene, by contrast, is well underway with demolition and construction of a downtown Urban Renewal project in the heart of its commercial district—complete with pedestrian malls and overpark structures at its periphery.

Coos Bay: In 1969 completed a shopping mall.

Salem: Awarded in January, 1970, a \$5 million HUD grant to redevelop the Civic Center. This city is also near a bid date for this project . . . which has been designed by a firm of local architects.

Bend: In this past year has put together a privately financed plan to preserve the historic Pilot Butte Hotel and to create an adjacent downtown Convention Center.

## utah

### 1970 AIA Committees

They are "off and running" in the Utah Chapter of the American Institute of Architects with Commission Coordinators and Committee Chairmen appointed and on the job. President Jim Christopher will have the able assistance of Kenneth W. Jones as Vice President, Joe Ashworth as Secretary, and Ralph F. Evans as Treasurer. Directors for the year ahead are William A. Richardson, Bruce H. Jensen and David Hayes. The Northern Utah Section is headed by Robert D. Hodgson with Fred M. Johnson as Secretary-Treasurer; the Central Section by Glen T. Mildenhall with Douglas Todd serving as Secretary-Treasurer.

Following the fruitful discussions held in Las Vegas at the Student Affairs Seminar, we note that each committee or commission includes a student from the University of Utah's Architectural School within its membership, thereby establishing a means of communication toward a better understanding between the student and the active practitioner. These committees and commissions are:

On the Professional Society: Bruce

Jensen, Coordinator; Von White, Chairman. Student Affairs: John Taft, Chairman. Internal Communications: Keith Richardson, Chairman. By-Laws and Nominating Committee: William Richardson, Chairman. Fellows Committee: R. Lloyd Snedaker, FAIA, Chairman. Education and Research: Ralph Evans, Coordinator. Architectural Design: David Hayes, Coordinator. Esthetics and Environmental Design: George Daniels, Chairman. Awards: William Browning, Chairman. Historic Buildings: Lee Knell, Chairman. Urban Design: Richard Stringham, Chairman. Education and Research (Committee, not Commission): Burtch Beall, Chairman. Internship Committee: William Nelson, Chairman. Technicians Training: A. Dean Jensen, Chairman. Continuing Education: Eldon Talbot, Chairman. Professional Practice: Kenneth Jones, Coordinator. Governmental Regulations: Albert Christensen, Chairman. Building Regulations: William Louie, Chairman. Office Procedures: Fred Montmorency, Chairman. Public Affairs: William Richardson, Coordinator. Public Relations: Fred Babcock, Chairman. Publication: David Hayes, Chairman. C.D.C. Steering Committee: Martin Brixen, Chairman.

The Utah Chapter also maintains a Building Industry Coordination Committee with the following gentlemen maintaining liaison with other segments of the Industry: Joe Ashworth/Consulting Engineers of Utah; Arthur Olson/Producers' Council; Charles Peterson/Associated General Contractors; Ronald Simmons/Construction Specifications Institute and Georgius Cannon, FAIA/American Institute of Interior Designers. The Committee on Social Responsibility is to be structured following Grassroots held in mid-January in San Francisco.

## wyoming

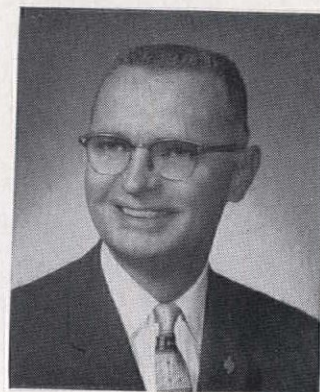
### 1970 Projection

It's always great when those winds from Wyoming bring us the "good word" from Gerry Deines, our Editorial Board buddy. It is equally gratifying to get Gerry's evaluation of the construction picture. It would seem all is "sweetness and light" up north, with Deines reporting that 1969 was a good year, and that this new year should be even better. Things are really looking up, he says, and adds, "I feel there should be some very nice projects coming from the Cowboy State this year. Projections from people who should know say that the 1970 decade in Wyoming will be phenomenal in both construction and industry!" Three cheers for solvency!



*For: The Western Section Director  
Construction Specifications Institute*

*Thomas W. Keeton, Jr.*



We have all heard about that fellow who "lived by the side of the road and was a friend to man." We would paraphrase that poet somewhat in our introduction to Tom Keeton who is "on the road," but is still a friend to man . . . particularly those men in the architecture/engineering/construction community.

Tom "on the road" wheels his 'Fury' from Montana's northern reaches to the sunny Rio Grande and even has the callouses on his hands to prove it. He is the architectural representative in these parts for the United States Ceramic Tile Corporation, and a fine representative he is, too.

Our Tom—and we are possessive—has had a very vital role in Symposia's growing up since June, 1966 (our first issue) and is the unopposed candidate for the office of the Western Section Director of the Construction Specifications Institute . . . and there's a job that will really put him "on the road."

Tom's C.S.I. record is something to behold—honored in 1969 by the Denver Chapter as its "Outstanding Industry Member," Tom is also a

charter member of the Pikes Peak Chapter in Colorado Springs. He has served Denver as Vice President, Treasurer and Director, he has been "on the spot" at all Region 10 Conferences and has attended many National's as a Convention Delegate. At the National CSI Convention held in Denver, Tom chaired the Ladies Activities (that's our Tom!) and has also been a member of the 1968-'69 Resolutions Committee.

He has all of those attributes most often found in "fearless leaders"—a warm and human approach to Industry problems backed by a mind like a steel trap. He has headed the Rocky Mountain Chapter of Producer's Council (two terms), Rocky Mountain Optimist Club and the President's Round Table. He is a retired Reserve officer (Chicken Colonel), Transportation Corps of the United States Army; a member of the El Jebel Shrine and Dragoman club. Vivacious Norma (his wife), Tom

III (doing his bit for Uncle), Pam (Senior at Colorado State University) and 12-year-old Debbie make up the Keeton family . . . and a very nice family, it is, too.

In January of 1967, Tom was accorded Symposia's Salute—at that time, we commended him for service "above and beyond" to the entire construction community. What we said then . . . we would say again . . . in spades!

"Tom's picture shows him complete with characteristic wide grin and "way out necktie." What doesn't show is his genuine interest in the world he lives in—and a heart as big as all outdoors. A genuinely warm salute to Tom Keeton who serves his industry well!"

**"laugh-in" – "hee-haw"  
or what you will!**

Borrowing a cup of chuckles from our neighbors to the north—Montana's "JPB"—(AIA Newsletter)—is about to become an old Symposia custom. This one is reprinted for use by all pubs, component or otherwise, whenever necessary.

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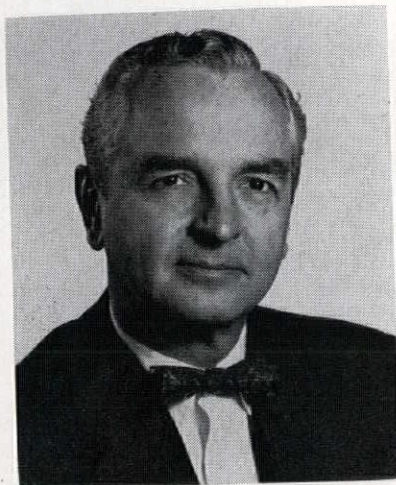
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Rex W. Allen, FAIA, President  
American Institute of Architects

## 1970 Public Affairs Conference

The concerted effort of Design Professionals to influence national legislation is climaxed each Spring with the Public Affairs Conference in Washington, D.C. jointly sponsored by the American Institute of Architects and Consulting Engineers Council/US. The 1970 Conference is scheduled for February 17-18, headquartered at the Mayflower Hotel, and will bring together architects and engineers from all fifty states. The program promises to be an exceptional one with participation by top officials of the Nixon Administration and members of Congress. For your better evaluation of the worth of the 1970 Public Affairs Conference, the advance program is printed here . . .

### MONDAY, FEBRUARY 16

3:00- 8:00 p.m.—Registration in the Lobby of the Mayflower Hotel

### TUESDAY, FEBRUARY 17

- 7:30 a.m. —Registration Continues
- 9:30 a.m. —“Analysis of the 91st Congress” (a special visual opening)
- 9:40 a.m. —Welcome and Introduction  
**William L. Slayton**, AIA Executive Vice President
- 9:45 a.m. —“Major Issues Facing the 91st Congress”—Panel  
Congressmen **Leslie C. Arends** (R-Ill.) and  
**Hale Boggs** (D-La.)
- 10:15 a.m. —“New Housing and Urban Programs”  
**Senator William Proxmire** (D-Wisc.)
- 10:45 a.m. —Coffee Break
- 11:00 a.m. —“Product Boycott Issue”  
Congressman **John B. Anderson** (R-Ill.)
- 11:30 a.m. —“Congress Seeks a National Policy On Urban Growth”  
**Senator Edmund S. Muskie** (D-Me.)
- 12:00 noon —Cocktails—Cash Bar—Chinese Room
- 12:20 p.m. —Luncheon—Grand Ballroom  
Presiding: **Rex Whittaker Allen**, FAIA, President/AIA
- 12:50 p.m. —Program: “Operation Breakthrough and General Discussion of HUD Programs”  
**George W. Romney**, Secretary, Department of Housing and Urban Development
- 1:25 p.m. —Reconvene  
Presiding: **Donald A. Buzzell**, Executive Director/CEC
- 1:30 p.m. —“Will the Government Require A-E's to Bid?”  
Congressman **Jack Brooks** (D-Texas)
- 2:00 p.m. —“The Administration's Concern for Environmental Quality”  
**Russell E. Train**, Under Secretary/Department of the Interior



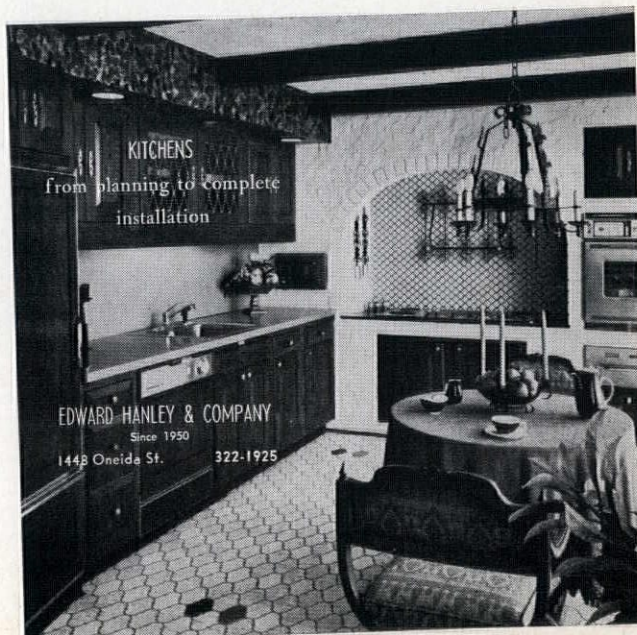
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- 2:30 p.m. —“Coming to Grips with Urban Crises”  
**Daniel P. Moynihan**, Counsellor to the President
- 3:00 p.m. —“Straightening Out the Codes Mess—A National  
Institute of Building Sciences”  
**Senator Jacob Javits** (R-N.Y.)
- 3:30 p.m. —“How the Federal Construction Cutback Will Affect  
A-E Projects”  
**Maurice Mann**, Assistant Director/Bureau of the Budget
- 4:00 p.m. —“The Economics of A-E Practice—Findings of the  
Construction Industry Census”  
**John R. Wikoff**, U.S. Bureau of Census
- 4:30 p.m. —Recess
- 6:30- 8:30 p.m. —**Congressional Reception** at the Smithsonian Museum of  
History and Technology (Buses leave Mayflower Hotel—  
6:15 p.m.)



### WEDNESDAY, FEBRUARY 18

- 8:00 a.m. —Congressional Presentation Breakfast  
Presiding: **Art V. Maxwell**, President/CEC
- 8:30 a.m. —“Behind the Scenes Report on Key Legislative Issues”  
**Larry Spiller**, CEC Staff  
**Phil Hutchinson**, AIA Staff
- 9:15 a.m. —ALL DAY—Meet Your Congressman  
Personal Calls on Capitol Hill

A cursory review of the program is really all that is necessary to underline the significance of this year's Public Affairs Conference. Remember the Conference is open to all engineers and architects. Information and Registration may be obtained from: AIA-CEC Public Affairs Conference Center, 1735 New York Avenue, N. W., Washington, D. C.—the cost is just \$35.00.



**Art V. Maxwell**, President  
Consulting Engineers Council/US

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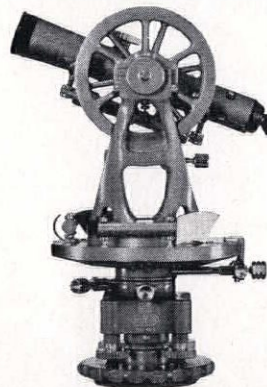
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## "THE MAN-MADE WORLD"

The announcement of a new grant of \$53,528 from the National Science Foundation to the University of Colorado's College of Engineering, the Colorado Department of Education and the Jefferson County and Aurora Public Schools is singularly apropos in this February issue which features both Educational Facilities and Engineers' Week. The grant will be used to train teaching teams from 13 Colorado School Districts together with officials and counselors from Colorado and Wyoming in a year-long program slated to begin this month.

C. U.'s Associate Dean of Engineering, George J. Maler, said this Cooperative College-School Science Program will use the textbook, "The Man-Made World," developed through the Engineering Concepts Curriculum Project of the National Science Foundation and the Commission on Engineering Education of the National Academy of Engineering. A pilot group of 30 teachers will convene in June to develop the accompanying curriculum guide, and new teaching teams will spend six weeks at the C.U. Engineering Center in July and August.

The ECCP seeks "to introduce into high schools a course that will serve as a basis for understanding the impact of modern technology on modern life and to work at the interface of the humanities and technology," Dean Maler said.

A key principle is the team approach, which puts teachers of science, social science and the humanities together into teaching teams.

To spark students' interest, stress is put on such topics as the lengthened perspective which the computer can offer to decision makers; the manner in which present-day mathematical modeling techniques can optimize the traffic flow in high school corridors during class changes or depict biomedical problems such as "the modeling of the trachea-bronchial system on the basis of pressure and flow measurements." Biomedical engineering examples are used lavishly.

Teachers selected by their school districts to participate in the program also get lecture and laboratory contact with logic design, systems organization, feedback and stability principles, man-machine interaction and the like.

To be eligible to participate, school districts must commit themselves to teach ECCP on a multi-disciplinary basis and give teachers of science and social science some release time to attend classes. Teachers get expenses from NSF funding and some graduate-level course credit.

In charge of the program, with Dean Maler as director, will be James N. Metzendorf, Consultant in Science for the Colorado Department of Education; Rolla Rissler, Coordinator of Special Projects for the Aurora School System; and Dean C. Larsen, Coordinator of Mathematics at the Jefferson County Schools. A lengthy list of other educators will teach the teachers.

Along with emphasis on the power of mathematics to analyze the complex factors which determine the quality of life in today's urbanized world, there will be considerable stress on the computer—"warranted both by the importance of this particular artifact in the current technological revolution and by the enthusiasm of the typical student for this subject," according to Dean Maler.

Computer terminals in the participating schools will be used extensively by both teachers and students.

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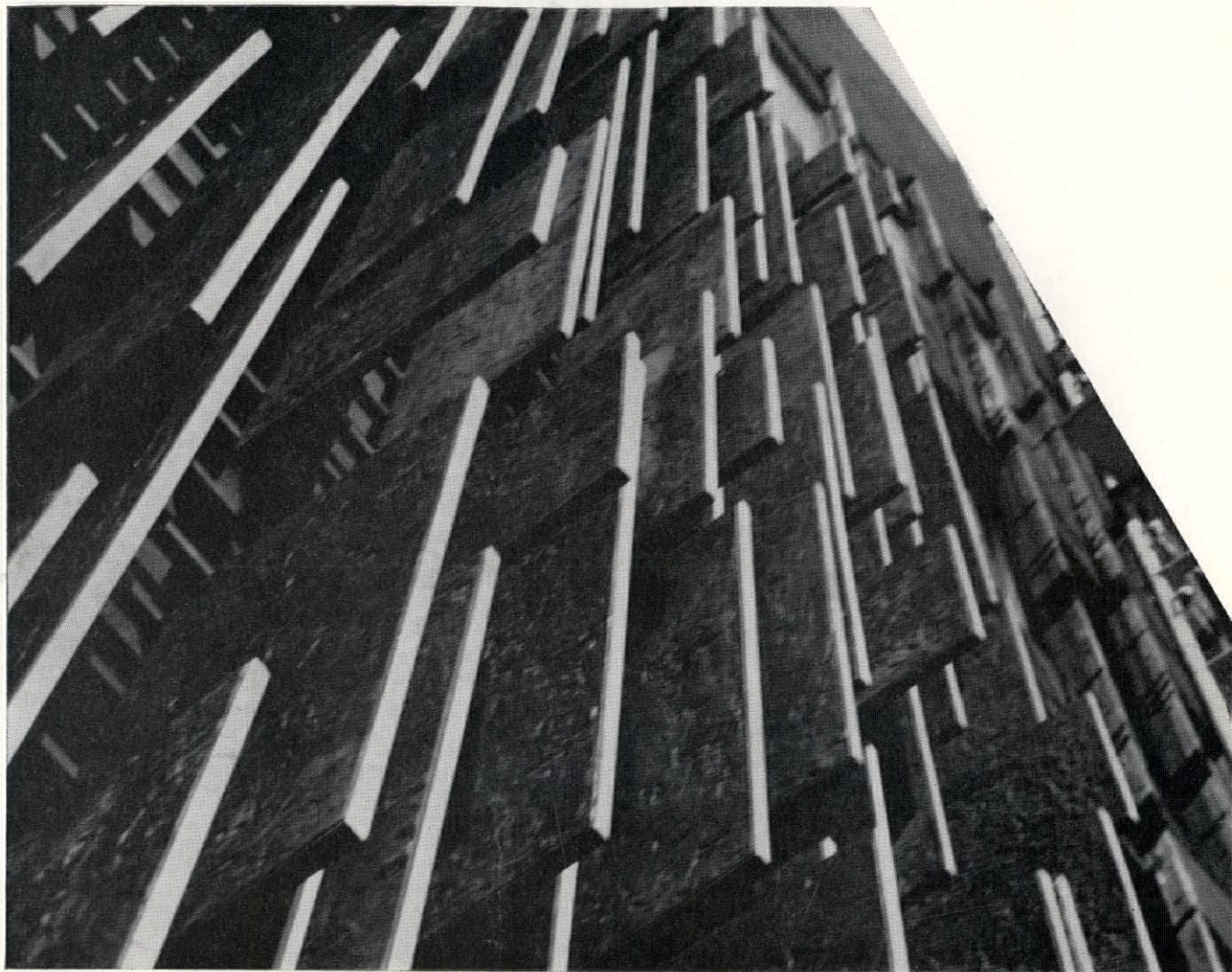
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